INDEX OF ABSTRACTS
Volume 21 (1974)

ABBOTT, James H. Difference structures in probability and analysis. Preliminary report, A-404.
ABDELKADER, Mostafa A. Real identities connecting circular and hyperbolic functions, A-377.
ABE, Kinetsu. Some examples of nonregular almost contact structures on exotic spheres. Preliminary report, A-499.
ABE, Kinetsu and ERBACHER, Joseph A. Isometric immersions with the same Gauss map. Preliminary report, A-208.
ABIAN, Alexander. A simplest example of a nonmeasurable set, A-303; Nonexistence of partially ordered sets with denumerably many dense subsets, A-381; Nonexistence of nonmolecular generic sets, A-556.
ABRAMSON, Fred G. and SACKS, Gerald E. On uncountable α-recursive wellorderings of α, A-321.
ABRAMSON, Fred G., HARRINGTON, Leo A., KLEINBERG, Eugene M. and ZWICKER, William S. Flipping properties: A unified approach to the study of certain large cardinals. I, A-321.
ACKERMANN, Ernest. j-diagrams for torsion free abelian groups, A-102; Weaving j-diagrams for torsion free abelian groups, A-390.
ADAMS, Michael E. The Frattini subalgebra of a Heyting algebra, A-524.
ADLER, Andrew and WILLIAMS, R. Douglas. Rings of continuous E-valued functions, A-327.
AGHDASSI-ALAMDARRI, Essa. On the Rademacher Fourier coefficients, A-546.
AHMAD, Shfaat. Boolean groupoids. Preliminary report, A-1.
AHSAN, Javed. Rings all of whose ideals are finitely embedded, A-530; Modules over qc-rings, A-589.
AIKEN, John. Decompositions of operators on direct integrals of Hilbert spaces, A-193; An application of direct integral theory to a question of Calkin, A-493.
AINSWORTH, Oscar R. A relationship between two sets of polynomials. Preliminary report, A-128.
ALAVI, Yousef and CHARTRAND, Gary. The existence of 2-factors in squares of graphs, A-37.
ALEXANDER, Annie Laurer. Bisimple ω-semigroups in the locally compact setting. Preliminary report, A-106.
ALEXANDER, Charles C. See STRONG, Lawrence D.
ALEXANDER, J. C. and YORKE, James A. Global bifurcation of periodic orbits, A-131.
ALEXANDER, J. P., HAMRICK, Gary C. and VICK, James W. Witt invariants for smooth periodic maps, A-229.
ALFORD, William A., HAVAS, George and NEWMAN, Michael F. Groups of exponent 4. Preliminary report, A-291.
AL-HASHIMI, Basil and BRENNEMAN, Franklin S. A note on algebraic Steenrod operations, A-6.
ALI, M. Shafqat. See MARCUS, Marvin.
ALI, Ziad S. (N, p_n) summability of Fourier series, A-495.
ALIPRANTIS, C. D. On the completion of Hausdorff locally solid Riesz spaces. Preliminary report, A-176.
ALIPRANTIS, Charalambos D. and LANGFORD, Eric. Almost σ-Dedekind complete Riesz spaces and the main inclusion theorem, A-45; Quotient Riesz spaces and quotient seminorms. Preliminary report, A-287.
ALLEN, Graham D. Spectral multiplicity and linear operators. Preliminary report, A-237.
ALLEN, Graham D., CHUI, Charles K., MADYCH, Wolodymyr R., NARCOWICH, F. J. and SMITH, Philip W. Padé approximation. Preliminary report, A-301.
ALLEN, Paul J. An extension of the Hilbert basis theorem to semirings. Preliminary report, A-74.
ALLEN, Richard C., Jr. and WING, G. Milton. An invariant imbedding algorithm for the solution of inhomogeneous linear two-point boundary value problems, A-241.
ALLEN, Richard J. Equivariant embeddings of spaces with involutions, A-217.
ALPERT, Seth R. Two-fold triple systems and graph imbeddings, A-390.
ALPERT, Seth R. and GROSS, Jonathan L. Components of branched coverings of current graphs, A-525.
ALSPACH, Brian R., REID, Kenneth B. and ROSELLE, David P. Bypasses in asymmetric digraphs. Preliminary report, A-31.
ALSTER, K. and PRZYMUSINSKI, Teodor C. Normality and Martin's axiom, A-452.
ALTER, Ronald. A problem of Diophantus. Preliminary report, A-50.
ALTHOEN, Steven C. A geometrical realization of a construction of Bass and Serre, A-406; A Seifert-van Kampen theorem for the second homotopy group. II. Preliminary report, A-570; A van Kampen theorem. Preliminary report, A-630.
ALVAREZ, Jairo Ivan. Linear functionals and local measures, A-486.
AMEMIYA, Ichiro, ITO, Takashi and WONG, Tin Kin. On quasinormal Toeplitz operators. Preliminary report, A-198.
ANDERSON, B. D. Extensions and approximations in function spaces. Preliminary report, A-639.
ANDERSON, Glen D. Extremal rings in n-space for fixed and varying n, A-122.
ANDERSON, Jack M. and ATWEH, William. Dimensionality for automata, A-256.
ANDERSON, James A. and KIMURA, Naoki. Tensor product of commutative semigroups which are the union of groups, A-83.
ANDERSON, William and TRAPP, George. Shorted operators. II, A-195.
ANDREWS, George E. On the ordered factorization of n and a conjecture of C. Long, A-366.
ANGELL, Thomas S. On optimal control for a class of Volterra equations. Preliminary report, A-200.
ANSON, Dennis. Totally ordered acts with connected state spaces. Preliminary report, A-5.
ANTON, Howard. See DURIS, Charles S.
ANTOSIEWICZ, Henry A. Bifurcation and admissibility, A-137.
APPLEBAUM, Charles H. Counterexamples in the theory of ω-functions, A-18.
APPLING, William D. L. Set functions, pointwise convergence and integral convergence, A-9; A convergence theorem for the dual of a certain function space, A-308; A representation characterization theorem, A-375; A right hand integral representation theorem for a class of quasi-continuous functions, A-442; Absolute continuity characterizing sets, A-532.
ARKIN, Joseph. A solution of orthogonal triples in four $10 \times 10 \times 10$ superimposed Latin cubes, A-31.
ARKIN, Joseph and STRAUS, E. G. Latin k-cubes, A-390.
ARKOWITZ, Martin, SCHIFFMAN, Stephan J. and EWING, John. H-structures on local spheres, A-223.
ARMACOST, David L. Compactly cogenerated LCA groups, A-111.
ARMENDARIZ, E. P. and FISHER, Joe W. Idealizers in rings. Preliminary report, A-457.
ARMENDARIZ, E. P., FISHER, Joe W. and STEINBERG, Stuart A. Central localizations of regular rings, A-69.
ARNOLD, David M. and MURLEY, Charles E. Abelian groups, A, such that Hom(A,-) preserves direct sums of copies of A, A-101.
ARNOLD, Jimmy T. Krull dimension in stably equivalent rings. Preliminary report, A-364.
ARNQUIST, Clifford W. A covering property of continua having an uncountable set of disjoint nonseparating plane embeddings, A-413.

ARON, Richard M. Compact holomorphic mappings on Banach spaces. Preliminary report, A-185.
ARORA, Manmohan Singh. The 4-parameter generalized Weibull family and its derivates, A-240.
ARTEMIADIS, Nicolas. A general theorem in the study of coefficient problems. Preliminary report, A-164.
ASH, J. Marshall. On Zygmund-Calderón singular integral operators with odd kernels, A-171.
ASIMOW, Leonard. Separation theorems for closed convex sets with nonempty intersection. Preliminary report, A-184.
ASNER, Bernard A., Jr. and LAKSHMIKANTHAM, V. Utilization of pointwise degenerate delay-differential equations as comparison functions. Preliminary report, A-394.
ASSAD, Nadim A. Fixed points of set valued functions, A-310.
ASSMUS, E. F., Jr. and MATTSON, H. F., Jr. Some 3-error-correcting BCH codes having covering radius 5. Preliminary report, A-548.
ATALLA, Robert E. The second dual of certain Choquet simplexes. Preliminary report, A-400.
ATWEH, William. See ANDERSON, Jack M.
AULL, Charles E. Notes on accessibility, k-spaces and sequential spaces. Preliminary report, A-384; A semi-stratifiable space is developable iff it has a $\delta\theta$-base, A-504; On C and C*-embedding. Preliminary report, A-619.
AUSPITZ, N. E. On Q-sheaves of Banach spaces. Preliminary report, A-431.
AZOFF, Edward A. Manifold-determined von Neumann algebras, A-198.
AZOFF, Edward A. and GILFEATHER, Frank. Measurable choice and the invariant subspace conjecture, A-198.
AZUMAYA, Goro. Characterizations of semiperfect and perfect modules. Preliminary report, A-288; Further characterization of semiperfect modules. Preliminary report, A-530.
BACHELIS, Gregory F. Density theorems for group algebras of a compact group and other annihilator Banach algebras, A-169.
BACON, Philip. Axiomatic shape theory, A-563.
BACOPOULOS, A., SHISHA, O. and TAYLOR, G. D. Characterization of best relative approximation, A-640.
BADGER, Lee Wilson. An Ehrenfeucht game for the language $L^{<\omega}$. Preliminary report, A-19; Beth's theorem fails in $L^{<\omega}$. Preliminary report, A-322.
BAERNSTEIN, Albert, II. Integral means of harmonic measures, A-125.
BAGBY, Richard J. Parabolic potentials with support on a half-space, A-114.
BAGLA, K. L. Instability due to density stratification, A-313.
BAJPAI, S. K. A note on a class of meromorphic univalent functions, A-376; Influence of $\frac{1}{2}f'(0)$ on the α-convexity of normalised starlike analytic functions f(z) of order β, A-487.
BAJPAI, S. K. and DWIVEDI, S. P. A subordination for certain classes of analytic functions, A-544.
BAKER, James D. See WRIGHT, Fred M.
BAKER, James D. and SHIVE, Robert A., Jr. The multiple picture problem in discrete image reconstruction. Preliminary report, A-247.
BAKER, Ronald D. Partitioning the planes of $AG_{2m}(2)$ into 2-designs, A-478.
BAKER, Ronald D. and WILSON, Richard M. The Whist-tournament problem of E. H. Moore. Preliminary report, A-588.
BAKKE, Vernon L. En embedding theorem for integral equations, A-173.
BAKKEN, Ivar. A multiparameter eigenvalue problem in the complex plane. Preliminary report, A-625.
BALAS, Egon. Facets of the knapsack polytope, A-11.
BALBES, Raymond. On the triple characterization for Stone algebras. Preliminary report, A-5.
BALCAR, Bohuslav. See ŠTĚPÁNEK, Petr.
BALDWIN, Joseph. Noiseless coding and the dependence capacity. Preliminary report, A-238.
BALL, B. J. Proper shape retracts, A-212.
BALLEW, David W. See LIPKIE, Curtis.
BALLEW, David W. and SELZLER, Michael. Certain mixed power sums. Preliminary report, A-479.
BANCHOFF, Thomas F. and STRAUSS, Charles M. Computer graphics investigation of singularities of projections of nonorientable surfaces in Euclidean 4-space, A-203.
BANDYOPADHYAY, Utpal K. Weak compactness of operators on C(S), S totally disconnected, A-117.
BANG, Chang M. Direct decompositions of torsion-free abelian groups of finite rank, A-96.
BANKSTON, Paul J. Topological ultraproducts and the separation axioms, A-330.
BARBACK, Joseph. Immune sets and regressive partial orderings. Preliminary report, A-27.
BARGER, Samuel Floyd. Invertible ideals and theory of grade. Preliminary report, A-387.
BARNARD, Roger W. On quasi-starlike functions. Preliminary report, A-123.
BARRIA-SANCHEZ, Jose. Chains of invariant subspaces. Preliminary report, A-299.
BARTELT, Martin. Commutants of multipliers and translation operators, A-183.
BARTH, Karl F. and SCHNEIDER, W. J. An example of a Julia line which is not a Milloux line. Preliminary report, A-122.
BASENER, Richard F. Rationally convex hulls of subsets of the unit sphere in C^2, A-127.
BASS, Charles D. Some special decompositions of E^3, A-618.
BASTIAN, Joseph J. A decomposition of weighted translation operators, A-195.
BAUMGARTNER, James E. Some results in the partition calculus. Preliminary report, A-29.
BAUR, Walter. $\aleph_0$-categorical modules. Preliminary report, A-554.
BEACHY, John A. On Morita's localization, A-455.
BEACHY, John A. and BLAIR, William D. Rings whose faithful left ideals are cofaithful, A-455.
BEALE, J. T. See ROSENCRANS, Steven I.
BEAN, Phillip W. Helly and Radon-type theorems in interval convexity spaces, A-205.
---. See REAY, John R.
BEARD, Jacob T. B., Jr. On matrices over GF(q) having prime minimal polynomials, A-57.
BEARD, Jacob T. B., Jr. and O'CONNELL, James R., Jr. Perfect polynomials. Preliminary report, A-602.
BEAUMONT, Ross A. Strongly semisimple abelian groups, A-96.
BECHTELL, Homer F. The prefrattini residual, A-88.
BECK, Anatole. Time in mathematics, A-19.
BECK, Walter E. Efficient quotient representations of meromorphic functions in the disk, A-122.
BECKER, David N. and FRANKLIN, James M. Using the numerical range to find a diagonal set containing the spectrum of a matrix, A-303.
BEDNAREK, A. R. See NORRIS, Eugene M.
BEDNAREK, A. R. and NORRIS, Eugene M. Induced function theorems in topology, A-346.
BEEM, R. Paul. On the action of free bordism on G-bordism. Preliminary report, A-570; On the structure of free Z_4-bordism. Preliminary report, A-618.
BEER, Gerald A. The index of convexity and parallel bodies, A-204.
BEIDLEMAN, James C. On Huppert's condition B. Preliminary report, A-84.
BEINEKE, Lowell W. See HEMMINGER, Robert L.
BEINEKE, Lowell W. and PIPPERT, Raymond E. Some results in the enumeration of tree-like structures. Preliminary report, A-30.
BEKES, Robert A. On square-integrable representations of locally compact groups. Preliminary report, A-169.
BELINFANTE, Johan G. F. Orthomodularity and transition probability. Preliminary report, A-344; Adjacency graphs of transition probability spaces. Preliminary report, A-616.
BELL, Harold. On universal maps on the n-ball, A-226.
BELL, Wayne C. A characterization of C-space maps, A-537.
BELLENOT, Steven F. Prevarieties and intertwined completeness of locally convex topological vector spaces. Preliminary report, A-185.
BENABDALLAH, Khalid and IRWIN, John M. On direct sums of cyclic groups, A-101.
BENKART, Georgia M. Inner ideals and classical Lie algebras, A-365.

BENNETT, Grahame. Tensor products of ℓ^p spaces. Preliminary report, A-309; Unconditional convergence and almost everywhere convergence. Preliminary report, A-488; Some ideals of operators on Hilbert space, A-532.
BENNETT, Harold R. On a subclass of Arhangel'skiĭ's class MOBI. Preliminary report, A-326; A note on LOTS. Preliminary report, A-598.
BENNETT, Harold R. and MARTIN, Harold. Mod K Moore spaces, A-17.
BENOKRAITIS, Vitalius. See IKEBE, Yasuhiko.
BENZINGER, Leonora. Uniform distribution and irreducible periodic representations of locally compact groups. Preliminary report, A-168.
BERAHA, Sami. Concerning the chromatic coefficients of the main Lewis form. Preliminary report, A-478.
BERENSTEIN, Carlos A. and TAYLOR, B. A. A "three squares" theorem for continuous functions, A-127.
BERGE, John O. See BRIN, Matthew G.
BERGER, Alan E., CIMENT, Melvyn and ROGERS, Joel C.W. Numerical solution of the Stefan problem by a method of alternating phase. Preliminary report, A-244.
BERGER, Melvyn S. A new global approach to free boundary problems, A-147.
BERGER, Thomas R. Characters and derived lengths in groups of odd order, A-88.
BERGLUND, John F. Compact semitopological completely 0-simple semigroups. Preliminary report, A-113.
BERKEY, Dennis D. A Gershgorin theorem for linear difference equations. Preliminary report, A-154; Column diagonally dominant linear differential systems. Preliminary report, A-308.
BERLEKAMP, Elwyn R. Combinatorial game theory, A-253.
BERMAN, Abraham. See TARSY, Michael.
BERMAN, Elizabeth A. Matrix rings over polynomial identity rings. II , A-68.
BERMAN, Joel David. Distributive lattices with an additional unary operation, A-477.
BERNAU, Simon J. Sequences of contractions on L_p-spaces, A-175.
BERNAU, S. J. and LACEY, H. Elton. A local characterization of Banach lattices with order continuous norm, A-533.
BERNDT, Bruce C. Positive sums of the Legendre symbol. Preliminary report, A-604.
BERNFELD, Stephen R. See LAKSHMIKANTHAM, V.
BERNFELD, Stephen R., LADDE, Gangaram S. and LAKSHMIKANTHAM, V. Nonlinear boundary value problems for second order differential systems, A-140.
BERS, Lipman. On Hilbert's 22nd problem, A-457.
BERTMAN, Martha O. The free topological inverse semigroup over a hornos, A-113.
BERTRAM, Edward A. Decomposition of the alternating group into the square of a small conjugacy class. Preliminary report, A-6; A density theorem on the number of conjugacy classes in finite groups of given orders. Preliminary report, A-477.
BHARUCHA-REID, A. T. Probabilistic operator theory, A-345.
BHASKARAN, M. A generalization of Hecke's generalized arithmetic progression theorem, A-4; A congruence involving residue class degree and class number, A-476; On the cyclic decomposition of polynomials, A-529; On the cyclic decomposition of polynomials and prime divisors of degree two, A-591.
BHATTACHARYA, Dipendra N. See MUKHERJEE, Rathindra N.
BHATTACHARYYA, S. P. and JAIN, S. K. Stability of an infinite horizontal layer of fluid with a spatial heat source in the presence of a magnetic field. Preliminary report, A-313.
BILYEU, Russell G. Boundedness with respect to the metric half-space topology on smooth Banach spaces, A-178.
BIRKENMEIER, Gary F. A decomposition of self-injective rings. Preliminary report, A-485.
BISHOP, Alan A. A universal mapping property for a lattice completion, A-454.
BIX, Michael C. Z_2-equivariant embeddings up to cobordism. Preliminary report, A-384.
BLACKMORE, Denis J. A nondensity example in $\mathrm{Diff}(S^2)$, A-347.
BLAIR, William D. See BEACHY, John A.
BLANTON, John D. The minimum number of critical points on 2-manifolds, A-230.
BLAU, Harvey I. Some criteria for the nonexistence of certain finite linear groups. Preliminary report, A-91.
BLEIER, Roger D. Some remarks on the orthocompletion on an ℓ-group. Preliminary report, A-334; An extension of linear programming duality to piecewise linear maps. Preliminary report, A-641.
BLEVINS, Donald K. and PALKA, Bruce P. A characterization of quasiconformal circles. Preliminary report, A-116.
BLOK, Willem J. Varieties of closure algebras. II. Preliminary report, A-475.
BLOK, Willem J. and DWINGER, Philip. Varieties of closure algebras. I. Preliminary report, A-366; Varieties of closure algebras. III. Preliminary report, A-475.
BLOOM, Clifford O. The rate of approach to the steady state of solutions of second order hyperbolic equations. Preliminary report, A-147.
BLOOM, Clifford O. and KAZARINOFF, Nicholas D. Local energy decay for a class of nonstar-shaped obstacles, A-150.
BLOWERS, James V. An adaptation of Powell's sigma-theta constrained nonlinear optimization method to accommodate inequality constraints, A-344.
BLUM, J. R. and COGBURN, Robert F. On ergodic sequences of measures. Preliminary report, A-340.
BLUM, J. R. and EPSTEIN, Bernard. On the Fourier-Stieltjes coefficients of Cantor-type distributions, A-162.
BLUMENSON, Leslie E. Some mathematical questions concerning random cellular movements. Preliminary report, A-332.
BOCK, David N. On the Navier-Stokes equations in noncylindrical domains. Preliminary report, A-152.
BODY, Richard A. Homotopy types whose rational cohomology is nice. Preliminary report, A-222.
BOEHME, Thomas K. Topologies for quotients of commutative algebras. Preliminary report, A-109.
BOGART, Kenneth P. See TROTTER, William T., Jr.
BOGART, Kenneth P., RABINOVITCH, Issie and TROTTER, William T. The dimension of interval orders is growing. Preliminary report, A-38.
BOGDA, Richard A. See SHANKAR, Hari.
BOGDA, Richard A. and SHANKAR, Hari. The growth of analytic functions. I. Preliminary report, A-120.
BOGDANOWICZ, Witold M. On a nonlinear operator in the space of Baire functions generated by a random process, A-236.
BOISEN, Monte B., Jr. and SHELDON, Philip B. A sufficient condition for pre-Prüfer rings, A-63.
BOJANIC, Ranko. A proof of Mahler's theorem on approximation of continuous functions of a p-adic variable by polynomials. Preliminary report, A-51.
BOLAND, Philip J. Holomorphic functions on nuclear spaces, A-490.
BOLKER, Ethan D. Counting trees in simplicial complexes. Preliminary report, A-32.
BONAR, Daniel D. and CARROLL, Francis W. Fatou points for annular functions. Preliminary report, A-119.
BOND, James W. Maximizing a functional depending on a finite matrix, A-66.
BOND, James W. and MISNER, John. Function decompositions defined by descending chains of subgroups, A-153.
BONNEAU, Richard J. An interactive implementation of the Todd-Coxeter algorithm. Preliminary report, A-293.
BOOK, Stephen A. An extension of the Erdös-Rényi new law of large numbers, A-234; The Cramér-Petrov large deviation theorem for triangular arrays. Preliminary report, A-628.
BOONE, James R. On k-quotient mappings, A-330; On irreducible spaces, A-559; On irreducible spaces. II, A-597.
BOOTHBY, William M. A transitivity problem from control theory, A-255.
BORELL, Christer. An inequality for a class of harmonic functions in n-space. Preliminary report, A-375.
BÖRGER, Egon and HEIDLER, Klaus. The m-degrees of

logical decision problems. Preliminary report, A-318.
BORGES, Carlos. Free topological groups, A-559.
BOROSH, I. Numerical evidence on the uniqueness of Markov numbers. Preliminary report, A-55.
BOULDIN, Richard H. Positive approximants versus positive near-approximants. Preliminary report, A-197.
BOURGIN, David G. A set valued mapping degree, A-225.
BOWMAN, Thomas T. The extension of the Pontryagin character functor to continuous-inverse abelian semigroups, A-114.
BOYCE, William E. See LAGINESTRA, Anthony V.
BOYD, Michael W. See TRANSUE, William R.
BOYLE, Ann K. Hereditary QI-rings, A-68.
BRAGG, Louis R. Singular nonhomogeneous abstract Cauchy and Dirichlet type problems related by a generalized Stieltjes transform, A-304.
BRAUDE, Eric John. Semilattice morphisms and topology. Preliminary report, A-211; The Lorch-Tong property and G_δ diagonals. Preliminary report, A-407.
BRAUN, Martin. Numerical studies of an area preserving mapping, A-139.
BRAWLEY, J. V. The number of polynomial functions which permute the matrices over a finite field, A-606.
BRAWLEY, Joel V., CARLITZ, Leonard and LEVINE, Jack. Scalar polynomial functions on the $n \times n$ matrices over a finite field, A-66.
BRECHNER, Beverly L. and MAULDIN, R. Daniel. Homeomorphisms of the plane, A-563.
BREMERMANN, Hans. See SWARTZ, Joel B.
BRENNEMAN, Franklin S. See AL-HASHIMI, Basil.
BRENNER, J. L. Covering theorems for nonabelian simple groups. IV., A-85.
BRENNER, J. L., CRANWELL, R. J. and RIDDELL, James. Covering theorems for finite nonabelian simple groups. V., A-83.
BRENNER, J. L., MacLEOD, R. A. and OLESKY, D. D. Nonfree groups generated by two 2-by-2 matrices, A-93.
BRESINSKY, Henrik. On prime ideals with generic zero $x_j = t^{n_j}$, A-5; Analytically equivalent planar cubic branches, A-290.
BREWER, James W., COSTA, Douglas L. and LADY, E. L. Prime ideals and localization in commutative group rings, A-60.
BREZIN, Jonathan P. When Frobenius reciprocity fails. Preliminary report, A-170.
BRIDGES, W. G. and SHRIKHANDE, Mohan S. On a class of p.b.i.b.d.'s. Preliminary report, A-40.
BRIGGS, James M. Finitely generated ideals in regular F-algebras. Preliminary report, A-183.
BRILLHART, John, LEHMER, Derrick H. and SELFRIDGE, John L. Primality testing and new factorizations of $2^m \pm 1$, A-55.
BRIN, Matthew G. and BERGE, John O. A handlebody with one pillbox has no fake 3-cells, A-505.
BRIZOLIS, Demetrios. On the ratios of integer-valued polynomials over any algebraic number field, A-59.
BROCKETT, Patrick L. An index for convergence of sums of independent random variables. Preliminary report, A-628.
BROLINE, Duane M. Properties of irreducible character kernels, A-590.
BROOKS, James K. and LEWIS, Paul W. Linear operators and vector measures. II. Preliminary report, A-177.
BROWN, Edward M. and BROWN, Marianne S. A determination of the isotopy group of certain contractible open 3-manifolds. Preliminary report, A-227.
BROWN, Ezra. Diophantine equations of the form $X^2 + D = Y^n$, A-480; Diophantine equations of the form $x^2 + D = y^n$, A-601.
BROWN, Jack B. Baire category in spaces of probability measures, A-345.
BROWN, Leon and SHIELDS, Allen L. Approximation by analytic functions uniformly continuous on a set, A-124.
BROWN, Marianne S. See BROWN, Edward M.
BROWN, Morton and COHEN, Marshall M. A proof that simple-homotopy equivalent polyhedra are stably homeomorphic, A-226.
BROWN, Richard C. Duality theory for nth order differential operators under Stieltjes boundary conditions. II: Nonsmooth coefficients and nonsingular measures. Preliminary report, A-139; Mathematical simulation of chemotherapy in cancer. Preliminary report, A-333.
BROWN, Ronald and HARDY, J. P. L. Subgroups of free topological groups and free products of topological groups, A-384.
BROWN, Terrence J. and GREECHIE, Richard J. Reductions and level products of orthomodular posets. Preliminary report, A-45.
BROWN, Thomas C. Some new Van der Waerden numbers. Preliminary report, A-432.
BRUCK, Ronald E., Jr. Weakly and strongly convergent iterative solutions of $0 \in U(x)$ for a maximal monotone operator U, A-192; Convergence of steepest descent for convex functions in Hilbert space, A-303.
BRUCKNER, Andrew. A theorem on extending derivatives, A-115.
BRUNEL, Antoine P., FONG, Humphrey S. and SUCHESTON, Louis. An ergodic super-property of Banach spaces defined by a class of matrices, A-440.
BRYANT, J. L. and LACHER, R. C. Embeddings with mapping cylinder neighborhoods, A-561.
BUCKLEY, James J. Unconditional probabilities for the voter's paradox. Preliminary report, A-617.
BULLEN, Peter S. On some forms of Whiteley, A-410.
BULMAN-FLEMING, S. and TAYLOR, W. Union-indecomposable varieties, A-529.
BUMBY, Richard T. and DOBBS, David E. Amitsur cohomology of quadratic extentions: formulas and number-theoretic examples, A-293.
BUNCE, John W. and DEDDENS, James A. C*-algebras with Hausdorff spectrum. Preliminary report, A-489.
BURCHARD, H. G. Degree of convergence of piecewise polynomial approximation on optimal meshes. II, A-639.
BURGESS, C. E. Embeddings of surfaces in Euclidean three-space, A-629.
BURGESS, John P. A new absolute logic. Preliminary report, A-319.
---. See STEEL, John.
BURGESS, John P. and MILLER, Douglas E. Invariant reduction and uniformization in the projective and analytical hierarchies, A-319.
BURGMEIER, James W. Some mathematical aspects of atmospheric aerosol modeling. Preliminary report, A-253.
BURKE, Victor, DUFFIN, R. J. and HAZONY, D. Distortionless wave propagation in inhomogeneous media and transmission lines, A-615.
BURNHAM, James T. On the multipliers of $A_p(G)$-algebras, A-7.
BURR, Stefan A., ERDÖS, Paul and SPENCER, Joel H. Ramsey theorems for multiple copies of graphs, A-35.
BURRIS, Stanley N. and SANKAPPANAVAR, H. P. Lattice-theoretic decision problems in universal algebra, A-13.
BURRY, J. H. Measures generated by functions of two real variables. Preliminary report, A-494.
BURTON, Theodore A. and HADDOCK, John R. Stability results for certain delay-differential equations, A-132; On the delay-differential equation $x''(t) + a(t)f(x(t - r(t))) = 0$, A-397.
BUSEMANN, Herbert. Problem IV: Desarguesian spaces, A-461.
BUSENBERG, Stavros and JADERBERG, Linda. Decay characteristics for differential equations without linear terms, A-135.
BUSHARD, Louis B. A singular nonlinear boundary value problem arising in the analysis of a cylindrical laser. Preliminary report, A-138.
BUTLER, John B., Jr. A note on smooth perturbations. Preliminary report, A-393.
BUTLER, Kim Ki-Hang. Connection between doubly stochastic matrices and equivalence relations, A-431; On Hedrlin subsemigroups of B_X, A-484; Enumeration of different collections of subsets of an n-set admitting SDR, A-604.
BUTTON, Robert W. Covers with no finite subcovers. Preliminary report, A-325.
BUTTS, Hubert S. and YEAGY, Robert W. Finite bases for integral closures, A-60.
BYRNES, James S. On a partition problem of Frobenius, II. Preliminary report, A-48.

CAHN, Robert S. The asymptotic expansion of the zeta-function of a compact semisimple Lie group, A-209.
CALABRESE, Philip. Space, points and mind. Preliminary report, A-250.
CALLAHAN, Willie R. Flexual modes of vibrations of truncated hyperbolically bounded plate with numerical results substantiating theory. Preliminary report, A-249.
CALLEGARI, A. J. and FRIEDMAN, M. B. The blow-off problem. Preliminary report, A-249.
CAMILLO, Victor and FULLER, Kent. On Loewy length of rings, A-76.
CANDIOTTI, Alan. The order of $K_2\mathcal{O}/(K_2\mathcal{O})^3$ for quadratic fields, A-388.
CANNON, John R. and FASANO, Antonio. On the movement of immiscible fluids in porous media, A-148.
CANNONITO, Frank B. See GATTERDAM, Ronald W.
CAPOBIANCO, Michael F. Testing a graph for connectedness, A-31.
CARASSO, Alfred. On least squares methods for parabolic equations and the computation of time periodic solutions. Preliminary report, A-243.
CARLITZ, L. Partitions with prescribed pattern, A-600.
---. See BRAWLEY, Joel V.
CARLSON, Bille C. Taylor series and Jacobi series, A-129.
CARLSON, Jon F. A basis for some relative permutation representation rings, A-94.
CARMICHAEL, Richard D. and MILTON, E. O. Distributional boundary values in the dual spaces of spaces of type S, A-181.
CARROLL, Carleton W. and ORR, William F. On the generalization of the sestina, A-11.
CARROLL, Francis W. See BONAR, Daniel D.
CARROLL, Michael P. On L_1 approximation of discontinuous functions, A-159.
CARRUTH, James H. Some comments on the role of inverse limits in the theory of topological semigroups. Preliminary report, A-95; A convenient category for [topological] algebraists. Preliminary report, A-635.
CASAS, Carmen. On a theorem of R. Palais and the projection method $\Pi_{\mathcal{C}}\{P_n\}$, A-494.
CASAZZA, Peter G. and LIN, Bor-Luh. Projections on Banach spaces with symmetric bases, A-182.
CATES, Marshall L. Commutators in a metabelian nilpotent group, A-105.
CAVARETTA, Alfred S., Jr. A theorem of Bernstein type for periodic spline functions, A-160.
CECIL, David R. Ternary algebras, bilinear forms, and automata, A-84.
CEDER, Jack. On Darboux selections, A-115.
CELIK, Hasan A. and OUTCALT, David L. Power-associativity of antiflexible rings, A-79.
CENZER, Douglas. Monotone inductive definitions over the continuum, A-19.
CESARI, Lamberto. Boundary value problems for hyperbolic quasi linear systems of first order partial differential equations. Preliminary report, A-148.
CHACON, R. V. A 'stopped' proof of convergence, A-323.
CHADAM, John M. and GLASSEY, Robert T. On certain global solutions of the (classical) coupled Klein-Gordon-Dirac equations in one and three space dimensions. Preliminary report, A-145; On the Maxwell-Dirac equations with zero magnetic field and time-dependent Hartree equations, A-593.
CHADWICK, Richard S. See INSELBERG, Alfred.
CHAFFER, Robert A., EGGEN, Maurice L., SMITH, Douglas D. and ST. ANDRE, Richard J. Strong finite embeddability for classes of quasigroups, A-3.
CHAITIN, Gregory J. A theory of program size formally identical to information theory, A-497.
CHALICE, Donald R. A polynomial approximation theorem. Preliminary report, A-187.
CHAMBERLAIN, Michael W. The excessive functions of a continuous time Markov chain, A-238.
CHAMPERNOWNE, Arthur. Generalised functorial semantics of algebraic theories. Preliminary report, A-527.
CHANDLER, Colston and GIBSON, Archie G. Generalized resolvent equations for multichannel scattering with Coulomb-like potentials, A-251.
CHANDRA, Jagdish, DAVIS, Paul William and FLEISHMAN, Bernard A. Minimum principles and positive solutions for a class of nonlinear diffusion problems. Preliminary report, A-397.
CHANEY, Robin W. On the rate of convergence of some feasible direction algorithms, A-254.
CHANG, I-Lok. On lacunary power series. Preliminary report, A-157.
CHANG, Theodore and SKJELBRED, Tor. Lie group actions on rational cohomology Cayley projective planes, A-229.
CHAPMAN, William H. and RANDTKE, Daniel J. On the complementation of c_0, A-610.
CHARLESWORTH, Arthur Thomas. Infinite cardinal functions which are minimal on metrizable spaces. Preliminary report, A-506.
CHARTRAND, Gary. See ALAVI, Yousef.
CHARTRAND, Gary and WALL, Curtiss E. On regular bipartite-preserving supergraphs, A-36.
CHARTRAND, Gary, POLIMENI, Albert D. and STEWART, M. James. Intercyclic graphs. Preliminary report, A-35.
CHARTRES, Bruce A. and STEPLEMAN, Robert S. Convergence of numerical methods for differential equations with discontinuities, A-241.
CHAWLA, Lal M. The vector space of multi-additive arithmetical functions. Preliminary report, A-48.
CHAWLA, Lal M. and MAXFIELD, John E. On a table of the product-sum partition function p(n, m). Preliminary report, A-49.
CHEEMA, M. S. and PALL, G. Integral positive quadratic forms of determinants less than 1, A-606.
CHEN, Bang-Yen and OGIUE, Koichi. On compact Kaehler manifolds. Preliminary report, A-499.
CHEN, Hilton C. C. A constructive method for periodic solutions, A-142.
CHEN, J. D. See PU, H. H.
CHERNOFF, Paul R. Quasi-analytic vectors and quasi-analytic functions, A-626.
CHEW, James F. Contagious properties, A-15; Invertibility of function spaces, A-323.
CHEWNING, William C. Systems with periodic asymptotically stable orbits, A-135.
CHI, George Yu-Hua. On Radon-Nikodym theorems. Preliminary report, A-342.
CHILDS, S. B. and MARON, M. J. An explicit formula for the optimum point of a quadratic subject to linear equality constraints, A-526.
CHILLINGWORTH, D. R. J. and STEFAN, P. Integrability of singular Banach distributions. Preliminary report, A-384.
CHINDA, Kewal P. The equation $F(F(x,y), F(z,y)) = F(x,z)$, A-153.
CHISWELL, Ian M. On groups acting on trees. Preliminary report, A-3.
CHOUDHARY, B. and SOMASUNDARAM, D. FK-spaces containing Γ. Preliminary report, A-542.
CHOW, Pao-Liu. Some functional differential equations associated with a random parabolic equation. Preliminary report, A-399.
CHRISTIAN, Floyd L., Jr. and JOHNSON, James J. A k-measure of irreducibility of doubly stochastic matrices. Preliminary report, A-336.
CHUAQUI, Rolando B. Some theorems about real multiples in a cardinal algebra, A-288; Completely divisible cardinal algebras, A-523; A classification of simple cardinal algebras, A-587.
CHUI, Charles K. Some recent results on Padé approximation, A-638.
---. See ALLEN, Graham D.
---. See PARNES, M. N.
CHUI, Charles K. and SMITH, Philip W. Characterization by certain infinite series, A-119.
CHUKWU, Ethelbert N. On the boundedness and stability properties of solutions of some differential equations of the fifth order. Preliminary report, A-372; On the boundedness of a certain fourth-order differential equation. Preliminary report, A-437.
CHUKWU, E. N. and HÁJEK, O. Disconjugacy for systems, A-537.
CHUNG, Lung Ock. Manifolds carrying bounded quasi-harmonic but no bounded harmonic functions, A-626.

CHURCHILL, Richard C., PECELLI, Giam, and ROD, David L. Isolated unstable periodic orbits, A-134.
CHVATAL, V. and SANKOFF, David. Homology of random macromolecules, and inference in molecular evolution. Preliminary report, A-386.
CHWE, Byoung-Song. A necessary condition for a ring such that each module has an irreducible epimorphic image. Preliminary report, A-74.
CIGNOLI, Roberto L. O. Injective De Morgan and Kleene algebras, A-293.
CIMENT, Melvyn. See BERGER, Alan E.
CLARK, Charles E. Potential Green's equivalences on semigroups. Preliminary report, A-96.
CLARK, David C. Eigenvalue bifurcation for odd gradient operators, A-15.
CLARKE, Frank. See JAMISON, Robert E. II.
CLINE, Edward T., PARSHALL, Brian J. and SCOTT, Leonard L., Jr. Cohomology of finite groups of Lie type, A-83.
COCHRAN, James A. Summability of singular values of $\mathcal{L}^2$ kernels, A-164.
COCKAYNE, E. J. Some tree-star Ramsey numbers, A-288.
COFFEE, Jane Purcell. A condition for a filtered ring to be rigid in the category of filtered rings, A-70.
COGBURN, Robert F. See BLUM, J. R.
COHEN, Frederick R. and LUSK, Ewing L. Configuration-like spaces and the Borsuk-Ulam theorem, A-463.
COHEN, Henry B. Isomorphisms of C(T) with small bound. Preliminary report, A-301.
COHEN, Joel S. and STEPHENS, A. B. Optimization problems for K_G; computer results for N = 4, A-186.
COHEN, Marshall M. Dimension estimates in collapsing $X \times I^n$. Preliminary report, A-329.
---. See BROWN, Morton.
COHEN, Moses E. On series expansions of generalized functions involving variable separation. Preliminary report, A-155; On series iteration involving hypergeometric functions. Preliminary report, A-411.
COHEN, Paul E. Preservation of chain conditions in sums. Preliminary report, A-381.
COHEN, Rina. See GOLD, Arie.
COHEN, Rina and GOLD, Arie. The ω Kleene closure of families of languages. Preliminary report, A-595.
COHOON, David. A characterization of the partial differential operators with constant coefficients which admit a continuous right inverse, A-151.
COIFMAN, Ronald R. See WEISS, Guido L.
COIFMAN, Ronald R. and WEISS, Guido L. Transferred harmonic analysis on Lie groups and homogeneous spaces, A-169.
COLEMAN, Donald B. and CUNNINGHAM, Joel. Comparing Witt rings, A-63; Forms on Dedekind domains. Preliminary report, A-63.
COMER, Stephen D. and DWINGER, Philip. Cancellation for bounded distributive lattices. Preliminary report, A-44.
CONNELLY, Robert. An attack on rigidity. I. Preliminary report, A-599.
CONNETT, William C. See SCHWARTZ, Alan L.
CONNETT, William C. and SCHWARTZ, Alan L. Interpolation of localized Lipschitz spaces of functions with applications to multipliers, A-625.
CONRAD, Paul F. a*-closures of lattice-ordered groups. Preliminary report, A-336.
CONWAY, John H. Hilbert's third problem, A-461.
COOK, Paul M. II. See KREIMER, H. F.
COONCE, Harry B. Kaplan-Mocanu functions, A-374.
COOPER, Ellis D. Combinatorial map theory, A-224; Listing finite partial orders, A-289.
CORAM, Donald S. and DUVALL, Paul F. A loop condition for embedded compacta, A-228.
CORAY, Chris S. Minimum norm differential approximation, A-243.
CORDES, Craig M. Some results on totally isotropic subspaces and five-dimensional quadratic forms over GF(q), A-52.
CORDUNEANU, Constantin. Functional equations with infinite delay. Preliminary report, A-153; Invariant spaces for a convolution operator and applications to functional equations. Preliminary report, A-400.
CORNISH, A. G. A new bound for p-function oscillation. Preliminary report, A-234.
COSTA, Douglas L. The factoriality of symmetric algebras, A-61.
---. See BREWER, James W.
COSTELLO, Patrick J. Four new amicable pairs, A-483.
COTLAR, Mischa and SADOSKY, Cora S. A moment theory approach to the Riesz theorem on the conjugate function with general measures, A-309.
COUGHLIN, Raymond F. Rings with completely alternative associators, A-78.
COVER, Alan S. and SOBCZYK, Andrew. Factorization of Mersenne numbers, A-337.
COX, S. H., Jr. and RUSH, David E. Finiteness in modules and algebras. Preliminary report, A-61.
COZZENS, John H. Maximal orders and reflexive modules, A-77.
CRANWELL, R. J. See BRENNER, J. L.
CRAWLEY, Peter. Structure theorems for a class of p-groups, A-97.
CREIGHTON, J. H. C. Hypersurfaces in odd dimensional real projective space, A-232.
CRONE, Lawrence J. and ROBINSON, William B. Every nuclear Fréchet space with r regular basis has the quasi-equivalence property, A-180.
CRUSE, Allan B. A note on symmetric doubly-stochastic matrices. Preliminary report, A-33; On extending incomplete latin rectangles. Preliminary report, A-363.
CRUSE, Allan B. and NEFF, M. F. Finite embeddability in a class of infinitary algebras, A-607.
CRYER, Colin W. Some properties of totally positive matrices, A-365.
CUNNINGHAM, Joel. See COLEMAN, Donald B.
CUNNINGHAM, Robert S. Pontryagin-like dualities and category equivalences. Preliminary report, A-67.
CURRAN, Michael John. Groups with decomposable involution centralizers. Preliminary report, A-476.
CUSICK, Thomas W. The two-dimensional Diophantine approximation constant, A-454.
DAHIYA, R. S. See SINGH, Bhagat.
DAHIYA, R. S. and SINGH, Bhagat. On the oscillation of a second order delay equation, A-491.
DAHN, Bernd. Definability in nonclassical logics. Preliminary report, A-13.
DAI, Taen-Yu. On a multiplication decomposition theorem in a dsc-pola, A-43.
DALEY, Robert P. Noncomplex sequences: Examples and characterizations. Preliminary report, A-445.
DALY, James E. Certain algebras of singular integral operators over K^d, K a local field. Preliminary report, A-168.
D'AMBROSA, Michael J. T_2-compactifications by collections of 0-1 regular measures. Preliminary report, A-118.
DATTA, B. N. A constructive method for finding Schwarz form of a Hessenberg matrix, A-497; A new Routh-type canonical form of a nonderogatory matrix, A-591.
DATTA, B. N. and DATTA, Karabi. An algorithm for computing powers of a Hessenberg matrix and its applications, A-531.
DATTA, Karabi. See DATTA, B. N.
DAUER, Jerald P. Controllability of nonlinear systems with restrained controls. Preliminary report, A-199.
DAVERMAN, Robert J. Conditions implying a codimension one manifold is locally flat, A-230; Sewings of closed n-cell complements. Preliminary report, A-617.
DAVEY, Brian. Duality for quasi-varieties, A-47; Dualities for varieties of relative Stone algebras. Preliminary report, A-434.
DAVEY, Brian A. and RIVAL, Ivan. Finite sublattices of three-generated lattices, A-484.
DAVEY, Brian A., RIVAL, Ivan and POGUNTKE, W. A characterization of semidistributivity, A-485.
DAVIS, Charles S. See LEPSON, Benjamin.
DAVIS, Charles S. and LEPSON, Benjamin. Entire functions of bounded absolute index, A-398.
DAVIS, Donald M. and MAHOWALD, Mark. The geometric dimension of some vector bundles over projective spaces. Preliminary report, A-223.
DAVIS, Larry W. An iterative function of Euler's

ϕ-function. Preliminary report, A-457.
DAVIS, Paul W. Parametric dependence of one-dimensional Green's functions, A-141.
---. See CHANDRA, Jagdish.
DAVIS, Philip J. Geometry, computer graphics, and theorems of visual type, A-568.
DAWSON, David F. Continued fractions with restricted variation properties, A-155; Continued fractions and totally monotone sequences, A-440.
DAWSON, Jeffrey L. and VASCONCELOS, W. V. Divisors of modules. Preliminary report, A-60.
DAWSON, John W., Jr. See HOWARD, Paul E.
DAY, Jane M. Pointwise periodic semigroups on 2-cells, A-84.
DAY, K. Michael. Measures associated with Toeplitz matrices generated by the Laurent expansion of rational functions, A-341.
DAY, William B. More eigenvalue estimates. Preliminary report, A-343.
DAYTON, Barry H. K-theory of special normed algebras, A-463.
DEBNATH, Lokenath. Unsteady dispersive long waves on a rotating ocean due to atmospheric disturbances, A-249; Dissipation of wave energy in an axisymmetric ocean model, A-445; Wave energy on a shallow rotating ocean with bottom friction, A-496.
DEBNATH, Lokenath and MUKHERJEE, Sukla. Inertial oscillations and multiple boundary layers in an unsteady rotating flow, A-343.
DEBNEY, George C., Jr. Transitions of Petrov type within a given space-time. Preliminary report, A-252.
DeCASTRO, Manuel B. Inference on incomplete and inadequate data when either the data or prediction functionals are multilinear. Preliminary report, A-240.
DEDDENS, James A. See BUNCE, John W.
DeKLEINE, Herbert Arthur and NAPARSTEK, Abraham. Exponential and asymptotic stability in the first approximation. Preliminary report, A-142.
DeMARR, Ralph E. Nonnegative idempotent matrices, A-65; Nonnegative idempotent elements in a partially ordered linear algebra. Preliminary report, A-632.
DeMARR, Ralph and SALAZAR, Tom E. An abstract model for matrix theory. Column model, A-634.
DeMEYER, Frank R. Groups of automorphisms of indecomposable vector bundles, A-77.
DEMKO, Stephen. Lacunary polynomial spline interpolation, A-160; Local mappings onto spline spaces, A-610.
DEMYS, K. A cuspless infinite hyperbolic plane and a remark on series, A-412.
DENCE, Thomas P. A Lebesgue decomposition for vector valued additive set functions, A-118.
DENDY, Joel E., Jr. Some approximation results for Hermite cubic subspaces, A-242.
DENNIN, Joseph B. Conjugacy classes of $LF(2, 2^n)$, A-85; The genus of fields of elliptic modular functions, A-433.
DENNY, William F. A linear Riemann-Stieltjes integral equation system. Preliminary report, A-637.
DERIGHETTI, A. A finite union of circles is a set of spectral synthesis. Preliminary report, A-547.
DERRICK, William R. Nodal solutions of nonlinear Sturm-Liouville functional equations, A-154.
DESHPANDE, Madhukar G. See FELLER, Edmund H.
DESMARAIS, Paul C. Primitive rings with involution and generalized pivotal monomials. Preliminary report, A-296.
DEUTSCH, Emeric. On some norm-normal operators in finite-dimensional normed spaces, A-197.
DEUTSCH, Frank. Existence and continuity of best approximations, A-638.
DEVENEY, James K. Pure subfields and modular extensions. Preliminary report, A-601.
DICKMAN, Raymond F., Jr. and PORTER, Jack R. On θ-continuous, θ-absolutely closed and θ-perfect maps. Preliminary report, A-215.
DIDERRICH, George. Information with probability. Preliminary report, A-550.
DIEDERICH, James R. Uniqueness of solutions of elliptic equations in Lipschitz domains. Preliminary report, A-399.
DIEL, Joseph H. Two definitions of finiteness, A-554.
DIETZ, David. See GREENBERG, William.
DILLON, John F. Partial spreads and Hadamard difference sets. Preliminary report, A-37.
DIMINNIE, Charles R. and WHITE, Albert G. A characterization of strictly convex linear 2-normed spaces. Preliminary report, A-7.
DLAB, Vlastimil J. and RINGEL, Claus Micha. Representations of valued graphs, A-387.
DOBBS, David E. Ascent and descent of going-down rings for integral extensions, A-523.
---. See BUMBY, Richard T.
DOBBS, David E. and PAPICK, Ira J. On going down for simple overrings. III, A-476.
DOLAN, J. Michael and KLAASEN, Gene A. Oscillation of nonhomogeneous equations, A-142.
DONALD, John D., HOLZMANN, Carlos and TOBEY, Malcolm. A characterization of complete matroid base graphs, A-41.
DOOB, Michael. A generalization of magic graphs. Preliminary report, A-365.
DOOHER, Terrence E. See WARREN, Richard H.
DOOLEY, Robert A. On convex metric extension. Preliminary report, A-505.
DORROH, James R. Fréchet type differentiability for nonlinear semigroups. Preliminary report, A-338.
DRAKE, Eric. Non-equivalent metric functions, A-537.
DRAPER, James A. Universal cohomology products and the delicate Hopf invariant. Preliminary report, A-346.
DRIVER, Rodney D. See LAKSHMIKANTHAM, V.
DROBOT, Vladimir. See SAMPSON, Gary.
DUBE, L. S. Common fixed points of two multi-valued mappings. Preliminary report, A-626.
DUBINSKY, Ed L. Applications of basis theory to expansions of analytic functions, A-179.
DUFFIN, Richard J. Some problems of mathematics and science, A-254.
---. See BURKE, Victor.
DUNKL, Charles F. A semigroup-type definition of Fourier-Stieltjes transforms. Preliminary report, A-166.
DUNKL, Charles F. and RAMIREZ, Donald E. L^∞-representations of commutative semitopological semigroups, A-166.
DUNN, Arnold M. Schauder decompositions of quasi-reflexive Banach spaces. II. Preliminary report, A-305.
DUPRE, Maurice J. Classifying Hilbert bundles, A-176.
DURBIN, John R. Locally compact wreath products. Preliminary report, A-112.
DURBIN, John R. and FARMER, K. Bolling. On projective representations of finite wreath products, A-600.
DURHAM, S. D. The succession of generations within a general age-dependent branching process, A-235.
DURIS, Charles S. and ANTON, Howard. Relationships between minimum norm and best approximate solutions of $Ax = b$ in normed spaces, A-196.
DURRETT, Richard T. and GHURYE, S. G. Waiting times without memory. Preliminary report, A-382.
DUSKIN, John W., Jr. On the existence of classifying complexes. Preliminary report, A-83.
DUVALL, Paul F. See CORAM, Donald S.
DWINGER, Philip. See BLOK, Willem J.
---. See COMER, Stephen D.
DWIVEDI, S. P. See BAJPAI, S. K.
EAKIN, Paul M. and HEINZER, William J. Ideal transforms of 2-dimensional noetherian domains, A-335.
EATON, William T. Pseudo isotopies and cellular maps in 4-manifolds. Preliminary report, A-229.
EBERLEIN, Patricia J. Global convergence of the QR algorithm for unitary matrices, A-247.
EBERLEIN, Patrick Barry. Horocycle flows on certain surfaces without conjugate points. Preliminary report, A-206.
EBERLEIN, William F. Distribution modulo 1 and the first digit problem, A-237.
EDMONDS, Jack. A linear decomposition theory. Preliminary report, A-391.
EDMUNDS, Charles C. On the endomorphism problem for free groups, A-294; Products of commutators as products of squares, A-480.
EDREI, Albert. The complete Padé tables of certain series of simple fractions, A-396.
EDWARDS, David A. Etale homotopy theory and shape, A-326.

EDWARDS, David and McAULEY, Patricia. The shape of a map, A-408.
EDWARDS, Robert D. Topological regular neighborhoods, A-230.
EDWARDS, Robert D. and MILLER, Richard T. Cell-like 0-dimensional decompositions of R^3 and R^4 factors, A-331.
EDWARDS, Robert D. and SCHARLEMANN, Martin G. A remark on suspensions of homology spheres, A-324.
EENIGENBURG, Paul J. and SILVIA, Evelyn Marie. A coefficient inequality for certain classes of univalent functions. Preliminary report, A-121.
EFROYMSON, Gustave A. A nullstellensatz for Nash rings, A-63.
EGGEN, Maurice L. See CHAFFER, Robert A.
EHRLICH, Gertrude. Units and one-sided units in regular rings, A-437.
EHRLICH, Paul Ewing. A local minorization of the convexity radius function on the space of metrics of a compact manifold, A-206; Complete, nonpositively curved "negatively pointed" metrics on $S^1 \times S^1 \times R^2$. Preliminary report, A-314.
EIDSWICK, John A. On nonintersecting truncations of families of lines, A-211.
EISEMAN, Peter R. See STONE, Alexander P.
EISENBERG, Edward Franklin. Effective isomorphisms of algebraic systems, A-551.
EISENBERG, Sheldon M. and WOOD, Bruce. On the degree of approximation by extended Hermite-Fejer operators. Preliminary report, A-157.
EISENBUD, David and EVANS, Edward Graham, Jr. Torsion free modules over integrally closed rings, A-62.
EISENFELD, Jerome and LAKSHMIKANTHAM, V. Comparison principle and nonlinear contractions in abstract spaces, A-134; Fixed point theorems through cones. Preliminary report, A-393.
EISNER, Julian R. Knots with infinitely many minimal spanning surfaces, A-347; A characterization of fibered knots, A-404.
EKLOF, Paul C. An undecidability result for Ext. Preliminary report, A-553.
EKLUND, Neil A. Generalized super-solutions of parabolic equations, A-143.
ELGETHUN, Edward David. Subgroups of central separable algebras with no zero divisors, A-336.
ELLIS, Richard S. Chapman-Enskog-Hilbert expansion for the Ornstein-Uhlenbeck process and the approximation of Brownian motion, A-234.
ELLIS, Richard S. and PINSKY, Mark A. Asymptotic equivalence of the Linear Navier-Stokes and heat equations in one dimension, A-306; Limit theorems for the linearized Boltzmann and Navier-Stokes equations, A-487.
EMBRY, Mary R. The numerical range of an operator. II. Preliminary report, A-196.
ENGENES, Hans. The equality axiom holds in any topos, A-80.
ENTRINGER, Roger C. and GASSMAN, Larry D. Geodetic orientations of graphs. Preliminary report, A-38.
ENTRINGER, Roger C., JACKSON, D. E. and SNYDER, D. A. Distance in graphs and digraphs. Preliminary report, A-40.
EPSTEIN, Bernard. See BLUM, J. R.
ERBACHER, Joseph A. See ABE, Kinetsu.
ERDELYI, Ivan. Unbounded operators with spectral capacities. Preliminary report, A-194; Spectral maximal spaces and weak spectral manifolds of unbounded operators, A-397.
ERDÖS, Paul. See BURR, Stefan A.
ERDÖS, Paul and REDDY, A. R. Rational Chebyshev approximation on the positive real axis, A-159; Remarks on rational approximation. Preliminary report, A-535.
ERNEST, John A. A classification, decomposition and spectral multiplicity theory for bounded operators on a separable Hilbert space, A-410.
ESFAHANIZADEH, J. and SIDDIQI, A. H. On the approximation of functions by de La Vallée Poussin mean of their Walsh-Fourier series, A-547.
ESPELIE, M. Solveig. Extreme positive functionals. Preliminary report, A-187.
ESSÉN, Matts R. and KEOGH, Frank R. The Schwarzian derivative and estimates of functions analytic on the unit disc, A-489.
ESTABROOK, G. F., JOHNSON, Carlos S., Jr. and McMORRIS, Fred R. An algebraic analysis of cladistic characters, A-333.
ETGEN, Garret J. and TAYLOR, Willie E., Jr. On the oscillation of a fourth order differential equation and its adjoint. Preliminary report, A-138.
ETGEN, G. J. and TEFTELLER, S. C. Three point boundary problems for second order differential systems. Preliminary report, A-614.
EVANS, Bruce. See McINTOSH, Alan G. R.
EVANS, Edward Graham, Jr. See EISENBUD, David.
EVANS, Michael Jon. On continuous functions and the approximate symmetric derivative, A-8.
EVANS, Trevor. Word problems, A-606.
EVANS, Trevor, MANDELBERG, Kenneth I. and NEFF, Mary M. Embedding algebras with a solvable word problem in simple algebras – some Boone-Higman type theorems, A-337.
EWING, John. See ARKOWITZ, Martin.
EWING, Richard E. Numerical solution of partial differential equations of Sobolev type, A-245.
EXTON, Harold. On the partial differential system of ${}_n\phi$, the confluent by hypergeometric function of several variables. Preliminary report, A-300; A type of orthogonal polynomial of the fourth order. Preliminary report, A-370; Incomplete hypergeometric functions. Preliminary report, A-437.
---. See SRIVASTAVA, H. M.
FABES, Eugene B., LITTMAN, Walter and RIVIERE, Nestor M. Transformers of pseudodifferential operators, A-199.
FABREY, James D. Integration of polynomials without evaluation of antiderivatives. Preliminary report, A-9; A modified Runge-Kutte method, A-299.
FADELL, Albert G. On the existence of regular approximate differentials for semicontinuous functions, A-115.
FAGIN, Ronald. $L_{k,\lambda}$-equivalence of ordinals and a compactness result, A-322.
FAIR, Wyman G. See RORRES, Chris.
FAIRES, Barbara. On Vitali-Hahn-Saks type theorems. Preliminary report, A-174.
FAITH, Carl. When are finitely generated faithful modules generators? Preliminary report, A-75.
FAJTLOWICZ, Siemion. Duality in universal algebra. II. Preliminary report, A-47.
FAJTLOWICZ, Siemion and SCHMIDT, Jurgen. Join-congruences and algebraic closure families. Preliminary report, A-481.
FARMER, K. Boiling. See DURBIN, John R.
FARRELL, F. Thomas. The K-dimension of $H^2(G, KG)$, A-436; Poincaré duality and groups of type (FP). Preliminary report, A-482.
FASANO, Antonio. See CANNON, John R.
FATTORINI, Hector O. Two point boundary value problems for operational differential equations, A-304.
FAUDREE, Ralph J., Jr. and SCHELP, Richard H. The square of a block is strongly path connected, A-33.
FAULKNER, Gary D. See HARLEY, Peter W. III.
FAVARO, Luiz A. See WELLS, Robert.
FAY, Temple Harold. A natural transformation approach to additivity. Preliminary report, A-366; A note on when a regular category is exact, A-478.
---. See TILLER, John A.
FEIN, Burton. Minimal splitting fields for group representations, A-91.
FEINERMAN, Robert P. and KELMAN, Robert B. Dual orthogonal series: An abstract approach. Preliminary report, A-165.
FEIT, Walter. Integral representations of finite groups. Preliminary report, A-95.
FELDMAN, William A. See PORTER, James F.
FELDMAN, William A. and PORTER, James F. Compact convergence and the order bidual for C(X). Preliminary report, A-180.
FELLER, Edmund H. and DESHPANDE, Madhukar G. Endomorphism ring of essential extension of a noetherian module, A-68.
FENG, Jinfu and MacGREGOR, Thomas H. Integral mean estimates for derivatives of functions with a positive

real part. Preliminary report, A-441; Estimates on integral means of the derivatives of univalent functions. Preliminary report, A-492.
FENNEMORE, Charles F. The construction of a subdirectly irreducible band which accepts the identity a = a, and generates the variety of all bands. Preliminary report, A-4.
FIALKOW, Lawrence A. A note on the similarity orbit of a normal operator, A-195.
FIEDLER, Miroslav, PTÁK, Vlastimil and HAYNSWORTH, Emilie. Extreme operators on polyhedral cones. Preliminary report, A-633.
FIELD, David A. On recent estimates of speed of convergence of continued fractions. Preliminary report, A-159.
FINDLEY, David F. Fréchet semiderivatives, A-180.
FINE, Arthur. A characterization of conditional probability, A-236.
FINE, Benjamin. Conjugacy classes and Fuchsian subgroups of the Picard group. Preliminary report, A-566.
FINE, Benjamin and TRETKOFF, Marvin D. The SQ-universality of certain linear groups. Preliminary report, A-390.
FINK, Arlington M. Spline approximations of almost periodic functions. Preliminary report, A-157.
FINK, James P., HALL, William S. and HAUSRATH, Alan R. A convergent two-time method for periodic differential equations, A-144.
FINKELSTEIN, Harold S. Enumerating automorphism orders in groups. Preliminary report, A-335.
FINKELSTEIN, Larry A. and JOSEPH, Keith Stuart. Groups with many equal classes. Preliminary report, A-86.
FISHER, Joe W. Nil subrings of endomorphism rings of modules with Krull dimension. Preliminary report, A-67.
---. See ARMENDARIZ, E. P.
FISHER, Stephen D. and JEROME, Joseph W. Spline solution to L^1 extremal problems in one and several variables, A-158.
FITTING, Melvin C. A recursive function theory for the finite sets. Preliminary report, A-317.
FITZGIBBON, William E. Time dependent second-order differential equations in Hilbert spaces. Preliminary report, A-199.
FLAHERTY, Francis J. Lorentzian manifolds with non-positive curvature, A-207.
FLANIGAN, Francis J. Radical embedding and toroidal derivations for nilpotent associative algebras, A-66.
FLEISHMAN, Bernard A. See CHANDRA, Jagdish.
FLEMING, Richard J. and JAMISON, James E. Adjoint abelian operators on L^p and C(K), A-191; Operators on $L^{p(t)}$. Preliminary report, A-199.
FLETCHER, Peter. See LINDGREN, William F.
FLUM, Jörg. Generalized quantifiers and reduced products. Preliminary report, A-317.
FONG, Humphrey S. See BRUNEL, Antoine P.
FONG, Humphrey S. and SUCHESTON, Louis. On a mixing property of operators in L_p spaces, A-306.
FONTENOT, Robert A. Measure compact C*-algebras, A-175.
FORD, Lawrence C. Generalized L^1 multipliers on LCA groups. Preliminary report, A-166.
FOREGGER, Thomas H. On facial minimizing matrices for the permanent function. Preliminary report, A-434.
FORREST, Williams K. Omitting open types in universal classes with amalgamation. Preliminary report, A-319; An n-cardinal theorem. Preliminary report, A-381; A property of uncountable free algebras. Preliminary report, A-431; A property of homogeneous structures, A-555; A result on the cardinality of definable sets. Preliminary report, A-596.
FOSSUM, Timothy V. Unimaximal orders, A-68.
FOULSER, David A. Planar p-groups in translation planes of order p^r, $p > 2$, A-202.
FOURNIER, John J. F. Multipliers of weak type, A-439.
FRAENKEL, Aviezri S. Combinatorial games with an annihilation rule, A-368.
FRAME, J. Sutherland. Characters and classes of the groups $O_n(2)$. Preliminary report, A-105.
FRANCIS, George K. Loewner's conjecture concerning curves of nonnegative circulation. Preliminary report, A-222.
FRANK, James L. On convex univalent functions. II, A-121.
FRANKE, Richard. Minimal point cubatures of precision seven for symmetric planar regions. II. Preliminary report, A-245.
FRANKFURT, Richard E. and ROVNYAK, James L. Finite convolution operators. Preliminary report, A-190.
FRANKLIN, James M. See BECKER, David N.
FRANKS, John M. Time dependent structural stability. Preliminary report, A-328.
FRASER, David F. Optimal strategies with prescribed stagnation time moments, A-239.
FRECHEN, Joseph B. See MIRANDA, Edward J.
FREEMAN, James W. Some properties of 2-reguli in a projective 5-space. Preliminary report, A-203.
FREEMAN, Michael B. An elementary invariant definition of forms of type (p,q), A-128.
FREY, George Thomas. An almost automorphism condition for pointwise limit functions on groups. Preliminary report, A-162.
FRIBERG, B. See TYMCHATYN, Edward D.
FRIČ, Roman. On convergence groups. Preliminary report, A-629.
FRICKE, Gerd H. and POWELL, Robert E. Functions of bounded index and summability methods, A-156.
FRIDY, John. Matrix summability of function sequences, A-155.
FRIEDBERG, Michael. Subresidually compact semigroups, A-86.
FRIEDBERG, Stephen H. Multipliers of closed ideals in group algebras, A-168.
FRIEDMAN, Harvey. The disjunction property implies the numerical existence property, A-552; Primitive recursive arithmetic without induction, A-595.
FRIEDMAN, M. B. See CALLEGARI, A. J.
FROEMKE, Jon. Functional completeness of idempotent algebras. Preliminary report, A-483.
FROEMKE, Jon and QUACKENBUSH, Robert Willis. The spectrum of an equational class of groupoids. Preliminary report, A-432.
FUCHS, Laszlo. Abelian groups and valued vector spaces. Preliminary report, A-97.
FUHRMANN, Paul A. J-symmetric restricted shifts. Preliminary report, A-438.
FULLER, Kent R. On rings of finite module type, A-588.
---. See CAMILLO, Victor.
FULTON, John D. Gauss sums and solutions to simultaneous equations over $GF(2^y)$. Preliminary report, A-605.
GAETA, Federico. Period relations for holomorphic differentials on an algebraic curve C of genus p, A-64.
GAGLIARDO, Emilio. See KOTTMAN, Clifford.
GAIHA, Prabha and GUPTA, S. K. Adjacent vertices on a permutohedron, A-446.
GALAMBOS, Janos. The almost sure behaviour of the largest coefficient in continued fractions, A-49.
GALLIAN, Joseph A. On the Hughes conjecture, A-99.
GALVIN, Fred. Bounds for power sets of singular cardinals. Preliminary report, A-554.
GANDHI, J. M. On Fermat's last theorem, A-53.
GANDHI, J. M. and PATEL, B. G. Size of the integers involved in the solution of Fermat's last theorem, A-457.
GANTER, Bernhard. Partial pairwise balanced designs, A-294.
GARCIA-CUERVA, Jose. Characterization of weighted H^p spaces, A-309.
GARD, Thomas C. Uniqueness criteria for Itô's equation. Preliminary report, A-344.
GARDNER, Clifford S., GREENE, John M., KRUSKAL, Martin D. and MIURA, Robert M. An alternate method for solving the Korteweg-deVries equation, A-150.
GARDNER, Robert B. Linear m-dependence test in modules over commutative rings, A-62; Submanifolds of Euclidean space, A-616.
GARFINKEL, Gerald. Completely torsionless modules, A-74.
GARIEPY, Ronald F. and LEWIS, John L. A maximum principle with applications to subharmonic functions in n space, A-374.

GARNER, Lynn E. Lineations between projective spaces, A-202.
GARSIA, Adriano M. Combinatorial inequalities and smoothness of functions, A-115.
GASKILL, Herbert S. A note on sublattices of a free lattice. Preliminary report, A-4.
GASPER, George. Some positive integrals of Bessel functions. Preliminary report, A-395.
GASSMAN, Larry D. See ENTRINGER, Roger C.
GASTL, George C. Bitopological spaces from quasi-proximities. Preliminary report, A-218.
GATTERDAM, Ronald W. and CANNONITO, Frank B. The word problem for one relator groups is primitive recursive, A-94.
GAULD, David B. Local contractibility of spaces of homeomorphisms, A-450.
GAUTHIER, Paul M. and GOLDSTEIN, Myron. The Dirichlet problem for functions taking their values in the extended numbers. Preliminary report, A-126.
GEIGER, David. Coherent algebras, A-436.
GEISSINGER, Ladnor. Combinatorics of symmetric functions. Preliminary report, A-41.
GEIST, Robert Miller III. Semicharacteristic detection of obstructions to rational homotopy equivalence, A-451.
GELBART, Stephen S. Applications of the Weil representation. Preliminary report, A-170.
GELLER, Dennis P. and KRONK, Hudson V. E. Further results on the achromatic number, A-31.
GEOFFROY, Dennis P. and SUMNER, David P. The edge nucleus of a point determining graph. Preliminary report, A-519.
GEOGHEGAN, Ross. Hilbert cube manifolds of maps, A-503.
GEOGHEGAN, Ross and LACHER, R. Christopher. Compacta with the shape of finite complexes, A-503.
GEORGANTAS, George T. Derivations in central separable algebras. Preliminary report, A-72.
GERBER, Porter Dean. Left alternative algebras and quadratic differential equations, A-137.
GERMANO, Giorgio M. Incompleteness of diophantine arithmetic, A-380.
GERSON, Martin Sebastian. Comparative semantics for propositional modal logic. Preliminary report, A-22.
GHATAGE, Pratibha. An extension of Nagy's theorem. Preliminary report, A-301; Operators with invertible characteristic function. Preliminary report, A-493.
GHOSHAL, Abha. See GHOSHAL, Sudhanshu Kumar.
GHOSHAL, Sudhanshu Kumar. Iterative solutions of abstract multinomial equations. Preliminary report, A-445.
GHOSHAL, Sudhanshu Kumar and GHOSHAL, Abha. A generalized method of solution of unsteady compressible boundary layer equations. Preliminary report, A-445.
GHOSHAL, Sudhanshu Kumar and MASOOD, M. Abu. Generalized Runge-Kutta formulas for ordinary differential equations with small parameter. Preliminary report, A-497.
GHURYE, S. G. See DURRETT, Richard T.
GIAMBALVO, Vincent W. Cobordism of Spin manifolds with involution, A-227.
GIARDINA, Charles R. Bounds on the integral of functions and their convolutions, A-255.
GIBSON, Archie G. See CHANDLER, Colston.
GIBSON, Peter M. Matrix commutators over an algebraically closed field, A-601; Products of symmetric doubly stochastic matrices, A-631.
GIBSON, William L. A correspondence associated with Stieltjes-Volterra integral equations. Preliminary report, A-637.
GILBERT, Robert P. and HSIAO, George Chia-Chu. On Dirichlet's problem for quasi-linear elliptic equations, A-143.
GILBERT, Robert P. and WEINACHT, Richard J. Reproducing kernels for elliptic systems, A-145.
GILFEATHER, Frank. See AZOFF, Edward A.
GILLOTTE, Michael J. and McLAUGHLIN, H. W. Approximation with an additive weight from varisolvent families, A-158.
GILMER, Robert. See PARKER, Tom,
GILMER, Robert and HOFFMANN, Joseph F. The integral closure need not be a Prüfer domain. Preliminary report, A-289.
GINÉ-MASDEU, Evarist. On the central limit theorem for sample continuous processes, A-235.
GINGRAS, Armando R. Convergence lattices. Preliminary report, A-433.
GINSBURG, John. Countably compact powers and β-compactness. Preliminary report, A-325; On some properties related to compactness in hyperspaces. Preliminary report, A-562.
GITTINGS, Raymond F. On semimetric spaces in which all spheres are open, A-325; Products of generalized metric spaces. Preliminary report, A-382.
GLASS, A. M. W. ℓ-simple lattice ordered groups, A-44.
---. See HOLLAND, W. Charles.
GLASS, A. M. W. and HOLLAND, W. Charles. Stabilizer extensions of ordered permutation groups, A-334.
GLASSEY, Robert T. See CHADAM, John M.
GLAUBERMAN, George. A signalizer functor theorem. Preliminary report, A-90.
GLEIT, A. and LAZAR, A. J. Basis constants for the space of $n \times n$ matrices. Preliminary report, A-538.
GLOBEVNIK, Josip. Complex strict and uniform convexity of the Lebesgue-Bochner space L_1. Preliminary report, A-186.
GLUCK, Lawrence. On an extension of Hardy's inequality and some weighted norm inequalities for the indefinite integral of conjugate functions, A-163; On the ideal of equicontinuous multipliers. Preliminary report, A-373; On p-weights for even and odd functions. Preliminary report, A-544.
GLUSTOFF, Errol. Some extensions of the implicit function theorem with applications to economic theory, A-253.
GODFREY, Colin. Ideals of orbits in the dual of a nilpotent Lie algebra, A-80.
GOEL, C. K. See VASUDEVAN, R.
GOEL, Devendra S., HOLLAND, Anthony S. B., NASIM, Cyril and SAHNEY, Badri N. Best approximation by a saturation class of polynomial operators, A-495.
GOLAN, Jonathan S. A Krull-like dimension for noncommutative rings, A-295; Modules satisfying both chain conditions with respect to a torsion theory, A-528.
GOLD, Arie. See COHEN, Rina.
GOLD, Arie and COHEN, Rina. The Chomsky hierarchy for ω-type languages. Preliminary report, A-549.
GOLDBERG, Michael. Covering a square by equal circles, A-446.
GOLDBERG, Moshe, TADMOR, E. and ZWAS, Gideon. On the numerical radius of a matrix. Preliminary report, A-433.
GOLDBERG, Samuel I. and PETRIDIS, Nicholas C. Curvature groups, A-315.
GOLDFARB, Warren D. Decision problems for quantificational formulas with few atomic subformulas, A-380.
GOLDSMITH, Deborah Louise. A class of Neuwirth links. Preliminary report, A-331.
GOLDSTEIN, Jerome A. Contraction semigroups on Hilbert space. Preliminary report, A-338.
GOLDSTEIN, Myron. See GAUTHIER, Paul M.
GOLUBITSKY, Martin and GUILLEMIN, Victor W. Contact equivalence for Lagrangian submanifolds, A-207.
GONSHOR, Harry. The relation between enlargements and Stone duality. Preliminary report, A-22.
GONZALEZ, Mario O. On the magnification ratio in nonconformal mappings. Preliminary report, A-124; The n-dimensional Cauchy-Riemann equations, A-613.
GOODEARL, Kenneth R. Homological dimension of differential operator rings. Preliminary report, A-76.
GOODEARL, K., HANDELMAN, D. and LAWRENCE, J. Strongly prime and completely torsion-free rings, A-521.
GOODMAN, Roe. Analytic continuation of the Fourier inversion formula on nilpotent Lie groups, A-110.
GOODMAN, Sue E. Closed leaves in 3-manifolds. Preliminary report, A-227.
GOOR, Robert M. Optimal control and approximation. Preliminary report, A-200.
GOPINATH, Bhaskarpillai. See KURSHAN, Robert P.
GORDON, Henry G. and RAYNA, Gerhard. Complete sequences and complete automata, A-256.
GORDON, Paul. Scaling of a system of first order hyperbolic partial differential equations, A-395.

GORDON, Robert. Nilpotency in endomorphism rings, A-72.
GOTTLIEB, Allan. Converses to the invariant lamination and Ω-stability theorems, A-233.
GOULD, H. W. Some new inverse series relations and new formulas for Stirling numbers, A-603.
GOULD, Matthew I. Endomorphisms of direct squares of algebras, A-2; Automorphism groups of direct squares of universal algebras, A-364.
GRABINER, Sandy. Formal power series, weighted shifts, H^p-spaces, and quasi-nilpotent operators, A-191.
GRAEF, John R. and SPIKES, Paul Wenton. Nonoscillation of a second order nonlinear differential equation, A-136.
GRAJEK, Michael A. Obstructions to collapsing K × I to vertical segments. Preliminary report, A-329.
GRANT, Douglass L. Productivity in $B_r(A)$ and B(A) topological groups, A-563.
GRÄTZER, George A. and PADMANABHAN, R. Symmetric difference in abelian groups, A-295.
GRÄTZER, George A. and SICHLER, J. On generating free products of lattices, A-42.
GRAVES, J. A. and MALONE, J. J. Euclidean near domains. I, A-70; Euclidean near domains. II, A-70.
GRAVES, William H. and MOLNAR, Suzanne M. A universal measure. Preliminary report, A-117; Applications of a universal measure. Preliminary report, A-459.
GREECHIE, Richard J. See BROWN, Terrence J.
GREELEY, Michael P. Gromov-Phillips transversality theorem in the complex analytic category. Preliminary report, A-227.
GREEN, Alwin C. Characterization of graphs with certain arcs, A-36.
GREEN, Judy. Cfω compactness for $\mathcal{P}$-admissible sets with urelements. Preliminary report, A-21.
GREEN, William L. Topological dynamics and C*-algebras, A-611.
GREENBERG, Brian. Global dimension of cartesian squares, A-61.
GREENBERG, William and DIETZ, David. Conditional entropy in classical statistical mechanics, A-248.
GREENE, John M. See GARDNER, Clifford S.
GREGORY, John. An approximation theory for generalized Fredholm integral-differential equations with applications, A-137.
GRILLET, Pierre A. Regular semigroups, A-86.
GRIMM, Louis J. Solvability of singular differential systems, A-623.
GRIMMER, Ronald. See SEIFERT, George.
GROETSCH, Charles W. Representations of the generalized inverse, A-302.
GROSS, Jonathan L. See ALPERT, Seth R.
GROSS, Jonathan L. and TUCKER, Thomas W. Quotients of complete graphs: revisiting the Heawood map-coloring problem, A-33.
GROSS, Kenneth B. Equivalence of Room designs. II, A-30.
GROSS, Kenneth I. Bessel functions on Hilbert algebras and representations of classical groups, A-107.
GROSS, Leonard. The free Euclidean Proca and electromagnetic fields, A-486.
GROSSMAN, Stanley I. Integrability of resolvents of certain Volterra integral equations, A-173.
GROVER, John M. Epimorphisms of units groups, A-524.
GROVER, John Moss and MALEK, Eugene. Ranks of Whitehead groups, A-297.
GRUENHAGE, Gary F. Large basis dimension and metrizability. Preliminary report, A-505.
GRUENHAGE, Gary and ZENOR, Phillip. Metrization of spaces with large basis dimension. Preliminary report, A-621.
GRÜNBAUM, Branko. Collinear k-tuples, A-202.
GRUNBAUM, F. Alberto. Identical distribution vs. orthogonal equivalence, A-557.
GUDDER, Stanley and STRAWTHER, Dexter. Orthogonality and nonlinear functions on vector spaces, A-186.
GUGGENHEIMER, Heinrich W. Convexity arguments for differential equations. I, A-394; Convexity arguments for differential equations. II, A-439; Applications of polarity, A-545.
GUILLEMIN, Victor W. See GOLUBITSKY, Martin.
GULICK, Denny. Domination in analysis, A-310.
GUMM, H. Peter. Mal'cev conditions in joins of varieties, A-295.
GUPTA, K. C. See SRIVASTAVA, H. M.
GUPTA, Manjul. See KAMTHAN, P. K.
GUPTA, S. K. See GAIHA, Prabha.
GUPTA, Vishnu. See SRIVASTAVA, J. B.
GUREL, Okan. Homoclinic limit cycles, A-406.
GUTHRIE, Joe A. See HENRY, Michael.
GUTHRIE, Joe A. and STONE, H. Edward. Pseudocompactness and invariance of continuity, A-407.
HADDOCK, John R. See BURTON, Theodore A.
HADWIN, Donald W. Closures of unitary equivalence classes. Preliminary report, A-306.
HAGAN, Melvin R. Continuity of certain connected functions and multifunctions, A-217.
HAGER, Anthony W. Pseudocompact cozero-fields and uniform spaces, A-562.
HAGER, Richard A. and ROSS, James E. Regularity of weak solutions of elliptic divergence equations. Preliminary report, A-143.
HAGIS, Peter, Jr. and McDANIEL, Wayne L. On the largest prime divisor of an odd perfect number. II. Preliminary report, A-370.
HAGLER, James N. On the structure of S and C(S) for S dyadic, A-490.
HAGOPIAN, Charles L. Fixed point theorems for products and hyperspaces, A-628.
HAJEK, Otomar. A unorthodox linearisation. Preliminary report, A-312; The actually used part of target, A-446; Pursuit with delayed pursuer response and effect, A-548.
---. See CHUKWU, E. N.
HALE, Douglas F. and NICKEL, James A. Self-paced instruction at the upper level. Preliminary report, A-256.
HALE, Jack K. Some remarks on bifurcation. Preliminary report, A-135.
HALE, Mark P., Jr. Automorphisms of 'graph-extension' graphs, A-100.
HALL, Japheth, Jr. Homomorphisms on groupoids with local identities. Preliminary report, A-609.
HALL, William S. See FINK, James P.
HALLENBECK, David J. and LIVINGSTON, Albert E. Applications of extreme point theory to classes of multivalent functions, A-544.
HALPERN, Fred. Some Barwise type results, A-27.
HALPERN, James D. Nonstandard combinatorics, A-28.
HALPERN, James D. and HOWARD, Paul E. Cardinal addition and the axiom of choice, A-28.
HALSEY, G. D. and HEWITT, Edwin. A group-theoretic method in musical theory, A-526.
HAMILTON, Howard B. Modularity of the structure lattice of commutative cancellative idempotent free semigroups, A-92.
HAMILTON, Howard B. and NORDAHL, Thomas. Composition series and semilattice decomposition. Preliminary report, A-104.
HAMILTON, Wallace L. and MERTENS, John R. Reproduction in tessellation structures. Preliminary report, A-256.
HAMRICK, Gary C. See ALEXANDER, J. P.
HANDA, S. See SRIVASTAVA, H. M.
HANDEL, David. Homotopy epimorphisms, A-224.
HANDEL, Michael. A resolution of two stratification conjectures. Preliminary report, A-331.
HANDELMAN, David. When is the maximal ring of quotients projective? Preliminary report, A-481.
---. See GOODEARL, K.
HANNSGEN, Kenneth B. Continuous parameter dependence in a class of Volterra integral equations. Preliminary report, A-392.
HANSON, Thomas and KING, Larry. Noncompact semigroup actions, A-89.
HANTLER, Sidney L. Estimates for reproducing kernels in weighted Hilbert spaces of entire functions, A-593.
HARDT, Robert M. Topological properties of subanalytic sets, A-451.
HARDY, J. P. L. See BROWN, Ronald.
HARLEY, Peter W. III and FAULKNER, Gary D. Metrization of symmetric spaces, A-219.
HARNIK, Victor. Approximation theorems for $L_{\omega_1\omega}$ and L_G, A-24.

HARRELL, Ronald E. and KARLOVITZ, Les A. On tree structures in Banach spaces. Preliminary report, A-537.
HARRINGTON, Leo. Long projective well orderings. Preliminary report, A-23.
---. See ABRAMSON, Fred G.
HARRIS, Douglas. Semirings and spectral spaces, A-221.
HARRIS, Theodore E. Reciprocal processes. I: Finite case. Preliminary report, A-502.
HARRIS, Vincent C. and SUBBARAO, M. V. On the divisor sum function. Preliminary report, A-291; Unitary multiperfect numbers, A-435.
HARRIS, William A., Jr. and LUTZ, Donald A. A unified theory of asymptotic integration, A-627.
HARTFIEL, D. J. Results on measures of irreducibility and full indecomposability, A-631.
HARTWIG, Robert E. The universal flip matrix and the generalized faro shuffle. Preliminary report, A-66.
HARVEY, Charles M. See STENGER, Frank.
HAUSEN, Jutta. The automorphism group of an abelian p-group, A-97.
HAUSRATH, Alan R. See FINK, James P.
HAVAS, George. See ALFORD, William A.
HAVAS, George and WALL, G. E. The group $\overline{B}(5,2)$. Preliminary report, A-364.
HAY, Louise. Rice theorems for d.r.e. sets, A-20.
HAY, Louise, MANASTER, Alfred B. and ROSENSTEIN, Joseph G. Small recursive ordinals, many-one degrees, and the arithmetical difference hierarchy, A-20.
HAYDEN, John L. A characterization of the finite simple group $PSp_4(3^m)$, m odd, m > 1, A-91.
HAYES, John K., KAHANER, David Kenneth and KELLNER, Richard G. A numerical comparison of integral equations of the first and second kind for conformal mapping, A-242.
HAYES, Stanley E. Completeness of spaces of Riemann-Stieltjes integrable functions, A-187.
HAYNSWORTH, Emilie. See FIEDLER, Miroslav.
HAZONY, D. See BURKE, Victor.
HEARD, Melvin L. A change of variables for functional differential equations, A-130.
HEATH, J. M. See WAKE, Graeme C.
HEATH, R. W. and LINDGREN, W. F. Weakly uniform bases. I. Preliminary report, A-620; Weakly uniform bases. II. Preliminary report, A-621.
HEATHERLY, Henry E. Group algebras and other constructions over near-rings. Preliminary report, A-634.
---. See OLIVER, Horace.
HEBB, Kevin R. Some results on addition chains. Preliminary report, A-294.
HECHLER, Stephen H. Products of some weakly compact spaces, A-214.
HEDRICK, Mark Blondeau. The permanent at a minimum on certain classes of doubly stochastic matrices, A-298; The permanent at a minimum on certain classes of doubly stochastic matrices, A-636.
HEEREMA, Nickolas and TUCKER, David S. Structure of modular field extensions. Preliminary report, A-479.
HEIDEL, John W. and JONES, Gary D. Asymptotic characterization of solutions of a nonlinear boundary value problem arising in fluid mechanics, A-340.
HEIDLER, Klaus. See BOGER, Egon.
HEIL, Erhard. Lie derivative, torsion, and parallel displacement. Preliminary report, A-314.
HEIN, James L. The convertibility of $\mathrm{Ext}^n_R(-,A)$, A-294.
HEINZER, William J. See EAKIN, Paul M.
HEISEY, Richard E. A factorization of the direct limit of Hilbert cubes, A-621.
HEITMANN, Raymond C. Generating ideals in Prüfer domains. Preliminary report, A-485.
HELTON, Burrell W. A product integral solution of a Riccati equation, A-172; The solution of a Volterra integral equation for rings, A-637.
HELTON, Jon C. Mutual existence of sum and product integrals, A-116; Product integrals and the solution of integral equations, A-372; Solution of integral equations by product integration, A-440; Existence of integrals and the solution of Riccati integral equations, A-538; Existence and approximation of integrals, A-592.
HEMMINGER, Robert L. and BEINEKE, Lowell W. Infinite digraphs isomorphic with their line digraphs. Preliminary report, A-30.
HENGARTNER, W. See RAO, A. Satyanarayan.
HENRIKSEN, Melvin. Conditions that guarantee that every nilpotent of a ring commutes with every element of the ring. Preliminary report, A-79.
HENRY, Michael and GUTHRIE, Joe A. Metrization and paracompactness by real functions. Preliminary report, A-212.
HENRY, Myron S. and WIGGINS, Kenneth L. Approximate solutions of nonlinear functional differential equations, A-442.
HENSON, C. Ward. First-order properties of Banach spaces. Preliminary report, A-22.
HERDA, Hans-Heinrich. Characterization of spheres among compact 3-bodies. Preliminary report, A-205.
HERLANDS, Charles W. Global dimension with respect to a triple, A-80.
HERMANN, Robert A. More nonstandard characteristics for compact-like spaces. Preliminary report, A-383; H(i) semiregular, U(i) and R(i) extensions. III, A-558.
HERRERO, Domingo A. Solution to the seventh problem of P. R. Halmos. Preliminary report, A-377; Closure of the similarity orbit of a Hilbert space operator. Preliminary report, A-542.
HERRMANN, Robert A. A simple set-theoretic characterization for proximity spaces, A-324; H(i) semiregular, U(i) and R(i) extensions. I, A-449; H(i) semiregular, U(i) and R(i) extensions. II, A-502; The point monad and topological generalizations. Preliminary report, A-597.
HERZ, Carl and PELLETIER, Joan Wick. Dual functors and integral operators in Ban, A-568.
HEUER, Gerald A. Uniqueness of equilibrium points in bimatrix games, A-311; Discrete ordered rings, A-483; On completely mixed strategies in bimatrix games, A-549.
HEWITT, Edwin. See HALSEY, G. D.
HILL, Paul. The freeness of Abelian groups, A-97.
HILL, Walter L. Galois groups attached to formal A-modules. Preliminary report, A-56.
HILL, W. Mack. Extra-special normal p-subgroups. Preliminary report, A-526.
HIMELWRIGHT, Paul. On the genus of Hamiltonian groups. Preliminary report, A-36.
HIRSCHFELDER, John J. Minicomputers and cross-assemblers. Preliminary report, A-247.
HIRSCHMAN, I. I., Jr. Szegö limit theorems on compact symmetric spaces, A-172.
HIRSHON, Ronald. On cancelling an infinite cyclic group. Preliminary report, A-296.
HIVELY, Gregory A. Wiener-Hopf operators induced by multipliers, A-192.
HO, Chat-Yin. Quadratic pairs for 3 whose root group has order greater than 3, A-93.
HODEL, Richard E. Extensions of metrization theorems to higher cardinality, A-16; On a theorem of Arhangel'skiĭ concerning Lindelöf p-spaces, A-324; Metrizability of topological spaces, A-453.
HODEL, Richard E. and VAUGHAN, Jerry E. A note on [a,b]-compactness. II, A-216.
HOFFMANN, Joseph F. See GILMER, Robert.
HOFMANN, Karl H., MISLOVE, Michael W. and STRALKA, Albert R. Dimension raining homomorphisms on compact zero dimensional semilattices, A-108.
HOFT, Hartmut and HOWARD, Paul E. A representation theorem for multi-algebras and the axiom of choice, A-635.
HOLLAND, Anthony S. B. See GOEL, Devendra S.
HOLLAND, W. Charles. See GLASS, A. M. W.
HOLLAND, W. Charles and GLASS, A. M. W. a*-extensions of lattice-ordered groups, A-334.
HOLLINGSWORTH, John G. and RUSHING, T. Benny. Weakly flat codimension 2 spheres, A-226.
HOLMES, Charles S. Direct products with Yff factors having isomorphic subgroup lattices, A-102.
HOLMES, J. P. A rank theorem for infinite dimensional spaces, A-616.
HOLZMANN, Carlos. See DONALD, John D.
HORN, Roger A. Quadratic forms in harmonic analysis and the Bochner-Eberlein theorem, A-541.
---. See HORN, Susan D.
HORN, Susan D. and HORN, Roger A. Estimating heteroscedastic variances in linear models--a simpler approach, A-240.

HORNE, J. G. Differentiability in semigroups, A-113.
HOROWITZ, Charles. Zeros of functions in the Bergman classes. Preliminary report, A-119.
HOWARD, Fredric T. Factors and roots of the van der Pol polynomials, A-608.
HOWARD, Paul E. See HALPERN, James D.
HOWARD, Paul E. See HOFT, Hartmut.
HOWARD, Paul E. and DAWSON, John W., Jr. Factorials of infinite cardinals, A-499.
HOWELL, Russell W. Annular functions and residual sets. Preliminary report, A-458.
HOWES, Frederick A. On approximate and true solutions of a nonlinear singular perturbation problem. Preliminary report, A-410; Transitional problems in nonlinear singular perturbation theory. Preliminary report, A-624.
HSIAO, George Chia-Chu. See GILBERT, Robert P.
HSIEH, David K. On representing the compactification of Banaschewski, A-16; A note on the B-realcompact space, A-559.
HSU, Ih-ching. A functional inequality and its relation to convexity for vector-valued or operator-valued functions, A-10.
HSU, L. C. Symmetrical inversion formulas for series transforms, A-311; Symmetrical inversion formulas for integral transforms. II, A-374.
HSU, Nai-Chao. Upper quasi-homology of $\otimes$ and Hom of sequences. Preliminary report, A-529.
HUA, Yang. A degenerate principle series of representations of U(2, 2), A-325.
HUANG, Ter-Jenq. Note on almost periodicity, A-112.
HUBBART, Wayland M. Idempotent subalgebras of $L_1(G)$ and induced characters. Preliminary report, A-167.
HUBER-DYSON, Verena. On elementary theories of free groups, A-27.
HUDSON, Richard H. The least pair of consecutive kth power nonresidues (mod p), A-601.
HUDSON, William N. and TUCKER, Howard G. Equivalence of infinitely divisible distributions, A-234.
HUFF, Gerald B. See PENNEY, David E.
HUGHES, Gordon H. Radical and coradical theory in monoidal categories. Preliminary report, A-409.
HUMI, Mayer. On the hull of a partial differential operator. Preliminary report, A-144.
HUMKE, Paul D. Cluster sets of arbitrary functions. Preliminary report, A-459.
HUMMEL, Kenneth G. On the order of the automorphism group of the central product. Preliminary report, A-92.
HUMPHREYS, James E. Reduction mod p of representations of Chevalley groups. Preliminary report, A-88.
HUNKINS, Dalton R. Cubatures of precision 2k and 2k + 1 for hyperrectangles. Preliminary report, A-401.
HUNSUCKER, John L. and POMERANCE, Carl. Odd super perfect numbers, A-335.
HUNT, David Christopher. See MORRIS, Sidney A.
HUNTER, Roger H. A characterisation of cotorsion groups and algebraically compact groups, A-293.
HUTCHINGS, Ed. Local homotopy in Bing's dogbone space, A-452.
HUTCHINSON, Joan P. Coloring maps made from Eulerian graphs. Preliminary report, A-228.
HUTCHINSON, Joan P., and WILF, Herbert S. Words with prescribed letter and letter-pair frequencies. Preliminary report, A-387.
HUTCHINSON, John E. Extending countable models of set theory. Preliminary report, A-322.
HUTCHISON, Jeanne S. Subconvex sets, A-316.
HUTTON, C. See MORRELL, Joseph S.
HYERS, Donald H. An eigenvalue problem for symmetric homogeneous polynomial operators, A-193.
IKEBE, Yasuhiko, BENOKRAITIS, Vitalius and SULLIVAN, James. Acceleration of stationary iterative processes by adaptive extrapolation. Preliminary report, A-241.
INFANTE, Ronald P. Strongly normal difference extensions. Preliminary report, A-56.
INFANTOZZI, Carlos A. An introduction to relations among convergence-divergence criteria for series, A-156.
INSEL, Arnold J. On inverse limits in cohomology groups of topological groups. Preliminary report, A-108.
INSELBERG, Alfred and CHADWICK, Richard S. Mathematical model of the cochlea, A-255; A mathematical model of the cochlea (inner ear), A-333.
IRWIN, John M. On $p^{\omega+n}$-projective p-groups. Preliminary report, A-97.
---. See BENABDALLAH, Khalid.
ISAACS, Godfrey L. A class of regular matrices. Preliminary report, A-545.
ISAACS, I. Martin. Lifting Brauer characters of p-solvable groups, A-91.
ISBELL, John. Some concrete dualities, A-567.
ISHAQ, Mohammad. On homomorphic relations in abstract algebras, A-509.
ISKANDER, Awad A. Product of ring varieties and attainability, A-287.
ISRAEL, Marvin. CAT local contractibility in spaces of homeomorphisms. Preliminary report, A-560; (TOP, CAT) - Local contractibility in spaces of homeomorphisms. Preliminary report, A-597.
ITO, Takashi. See AMEMIYA, Ichiro.
IYER, Hariharan K. A characterisation of $\Omega_{2n+2}(\nu, q)$ by the centraliser of an involution of type 2n. Preliminary report, A-475.
JACKSON, D. E. See ENTRINGER, Roger C.
JACOB, R. T., Jr. Matrix transformations on analytic sequence spaces. Preliminary report, A-612.
JACOBOWITZ, Howard J. Periodic solutions of $x'' + f(x, t) = 0$ via the Poincaré-Birkhoff theorem, A-141; The Gauss-Codazzi equations. Preliminary report, A-642.
JACOBS, Donald R. Lie derivations on the skew elements of simple rings with involution, A-433.
JACOBSON, David. Linear GCD equations, A-60.
JADERBERG, Linda. See BUSENBERG, Stavros.
JAFARIAN, Ali A. Weak contractions of Sz-Nagy and Foias are decomposable. Preliminary report, A-300.
JAIN, Padam C. and PRAKASH, C. V. S. Universal stability criterion for ferro-fluids, A-496.
JAIN, Prabha. Integrability theorems for trigonometric series with quasi-monotone coefficients, A-7.
JAIN, Saroj. Flat and FP-injectivity, A-71.
JAIN, S. K. See BHATTACHARYYA, S. P.
JAIN, S. K. and SINGH, Surjeet. Quasi-injective and pseudo-injective modules, A-73; Semiprimary rings with quasi-projective left ideals. Preliminary report, A-389.
JAIN, S. K., SINGH, Surjeet and SYMONDS, Robin G. When are proper cyclics quasi-injective? Preliminary report, A-456.
JAMES, David A. Factors of automorphy, A-124.
JAMES, Robert C. A nonreflexive Banach space that is uniformly nonoctahedra, A-188.
JAMES, Thomas R. The p-spaces and other general spaces as forms of completeness. Preliminary report, A-215.
JAMISON, James E. See FLEMING, Richard J.
JAMISON, Robert E. II and CLARKE, Frank. Measures, multicolorings, and games on graphs, A-296.
JAMISON, Robert E. II, O'BRIEN, Richard Christopher, and TAYLOR, Peter D. Embedding convex sets in locally convex linear spaces. Preliminary report, A-441.
JANOS, Ludvik. On endomorphisms of compact topological groups, A-15; Linear contractions on Fréchet spaces. Preliminary report, A-304; On representations of self-mappings by contractions, A-452.
JANOWITZ, Melvin F. On the "del" relation in certain atomistic lattices, A-43; SM-semilattices, A-608.
JANUSZ, Gerald J. Generators of the Schur group. Preliminary report, A-69.
JATEGAONKAR, Arun V. Integral group rings of polycyclic groups, A-77.
JAWORSKI, Allan. The Kakutani-Bebutov theorem for groups, A-506.
JAYACHANDRAN, M. and RAJAGOPALAN, M. Scattered compactification of $N \cup \{p\}$. Preliminary report, A-617.
JECH, Thomas. On a problem of Rubin and Rubin, A-22; A descending sequence of models of HOD sets. Preliminary report, A-322.
JEFFCOTT, Barbara R. Semimodularity in logics representing sequential operations, A-46.
JELTSCH, Rolf. Stiff stability and its relations to

A_0 and A(0)-stability, A-627.
JENKINS, Terry L. and van LEEUWEN, L.C.A. On the hereditariness of the upper radical, A-67.
JEROME, Joseph W. See FISHER, Stephen D.
JHA, Vikram. On finite tangentially-transitive projective planes, A-201.
JOCKUSCH, Carl G., Jr. and SIMPSON, Stephen G. Degree-theoretic hierarchies, A-552.
JOHARI, Shyam. Asymptotic behavior of the solution to a class of nonlinear Volterra integral equations, A-489.
JOHN, Chester C., Jr. A theorem on torsion commutative semigroups. Preliminary report, A-92.
JOHNSEN, Eugene C. Essentially doubly stochastic matrices, A-410.
JOHNSON, Carlos S., Jr. See ESTABROOK, G. F.
JOHNSON, Gerald W. and SKOUG, David L. A function space integral for a Banach space of functionals on Wiener space, A-178.
JOHNSON, Gerald W. and WOODWARD, Gordon S. On p-Sidon sets, A-167.
JOHNSON, Gordon G. Homeomorphisms, iteration and linear independence, A-339.
JOHNSON, James J. See CHRISTIAN, Floyd L., Jr.
JOHNSON, James S. Varieties of two dimensional cylindric algebras. Preliminary report, A-45.
JOHNSON, Jerry A. Extreme measurable selections, A-176.
JOHNSON, Jimmie Lee. The uniform continuity of certain translation semigroups, A-341.
JOHNSON, Johnny A. On a class of Noether lattices, A-44.
JOHNSON, Kenneth D. Fourier transforms on Lie groups. Preliminary report, A-332.
JOHNSON, Marjory J. Radicals of regular near-rings. Preliminary report, A-74.
JOHNSON, Robert Wells. p-adic proofs of congruences for the Bernoulli numbers, A-52.
JOHNSON, Roy A. Cross section measure of a Borel set need not be a.e. measurable, A-303.
JOINER, Harry F. II. Order characterizations of properties of bases, A-161.
JONES, Gary D. See HEIDEL, John W.
JONSSON, Bjarni. The sum of two finitely based lattice varieties need not be finitely based, A-2.
JONSSON, Bjarni, and OLIN, Philip. Elementary equivalence and relatively free products of lattices. Preliminary report, A-370.
JORDAN, Don M. Completely positive matrices, A-337.
JORDAN, George S. A convolution relation with remainder estimate. Preliminary report, A-122.
JORDAN, James H. and WEBB, William A. Covering classes of residues for polynomial rings over finite fields. Preliminary report, A-52.
JOSEPH, Keith Stuart. See FINKELSTEIN, Larry A.
JOSHI, Chandra Mohan and PRAJAPAT, M.L. On a unified presentation of certain classical polynomials. Preliminary report, A-310; On some properties of a class of polynomials unifying the generalized Hermite, Laguerre and Bessel polynomials. II. Preliminary report, A-371; Triple integral transformations of certain generalized hypergeometric functions. Preliminary report, A-488; On generating functions for generalized Hermite, Laguerre and Bessel polynomials. Preliminary report, A-543.
JOSHI, Mohan C. Existence theorems for nonlinear integro-functional equations. Preliminary report, A-174.
JOSS, Richard R. On a conjecture of B. H. Neumann. Preliminary report, A-204.
JUBERG, Richard K. Measure of noncompactness and interpolation of compactness for a class of integral transformations, A-195.
JULIAN, William H. Is the pulsar magnetosphere problem well posed? Preliminary report, A-252.
JUNGHENN, H.D. Weakly almost periodic Radon-Nikodym derivatives. Preliminary report, A-534.
KAC, Mark. Some analytic problems suggested by statistical mechanics, A-568.
KAHANER, David Kenneth. See HAYES, John K.
KAINEN, Paul C. Nontriangular genus and thickness of graphs. Preliminary report, A-37.
KAISER, Paul Joseph. Closed operators in problems of optimal control with distributed and boundary parameters, A-313.
KALISCH, Gerhard. Perturbations and unitary invariants of Sturm-Liouville operators. Preliminary report, A-194.
KALLMAN, Robert R. A theorem on compact simple Lie groups, A-16.
KALMAN, John A. The lattice of varieties of de Morgan lattices. Preliminary report, A-605.
KAMINKER, Jerome and SCHOCHET, Claude L. A spectral sequence for $\delta xt(X)$. Preliminary report, A-510.
KAMOWITZ, Herbert M. An inequality for analytic functions, A-121.
KAMTHAN, P.K. and GUPTA, Manjul. Space of entire functions of several complex variables having finite order point. Preliminary report, A-547.
KAMTHAN, P.K., GUPTA, Manjul and RAY, S.K. Schauder decomposition in dual and bidual spaces. Preliminary report, A-496.
KANAMORI, A. A characterization of nonregular ultrafilters, A-381.
KANNAN, Dhandapani. Potential operators in Dirichlet spaces. Preliminary report, A-404.
KANNAN, Rangachary. On periodically perturbed conservative systems, A-152; Existence of solutions of semilinear operator equations, A-197.
KANNAN, V. Two metric topologies with only two regular open sets in common, A-385; A note on countable generated spaces, A-449.
KANAN, V. and VIJAYAKUMAR, A.K. Rigid subsets of the real line, A-505; Non-measurable sets in LCA groups, A-546.
KANNAPPAN, Palaniappan. Characterization of certain groupoids and loops, A-99.
KANTER, Marek and STEIGER, William L. Estimating linear relationships for stable random variables. Preliminary report, A-239.
KAPLAN, Aroldo. See PUTZ, Robert.
KAPLAN, James L. and YORKE, James A. Ordinary differential equations which yield periodic solutions of differential delay equations, A-134.
KAPOOR, G.P. A note on the growth of functions analytic in a disc. Preliminary report, A-373; On the coefficients of functions analytic in the unit disc having fast rates of growth, A-539.
KARLOVITZ, Les A. See HARRELL, Ronald E.
KARNIK, S.M. See WILLARD, Stephen.
KARTSATOS, Athanassios G. Stability via Tychonov's theorem. Preliminary report, A-130; Global controllability of perturbed quasi-linear systems. Preliminary report, A-338; Locally invertible operators and existence problems in differential systems. Preliminary report, A-392; The Hildebrandt-Graves theorem and existence problems. Preliminary report, A-541.
KARTSATOS, Athanassios G. and MANOUGIAN, Manoug N. Further results on oscillation of functional differential equations. Preliminary report, A-441.
KARTSATOS, Athanassios G. and WARD, James R. Boundedness and periodicity of quasi-linear systems. Preliminary report, A-496.
KATZ, Jerome M. The radical of a Jordan algebra and extensions of the base field, A-78.
KAUFFMAN, Robert M. Polynomials and the limit point condition, A-135.
KAUFMAN, Edwin H., Jr. and TAYLOR, Gerald D. Uniform approximation of functions of several variables by generalized rational functions, A-161.
KAUL, Veena. Optimal rules for the numerical integration of periodic analytic functions, A-498.
KAULGUD, N.N. Sequence of mappings and fixed points. Preliminary report, A-493; Fixed point theorems for set-valued mappings. Preliminary report, A-329.
KAY, Alvin J. Nonlinear integral equations and product integrals, A-636.
KAY, David C. A nonalgebraic theory for topological linear spaces. Preliminary report, A-205.
KAZARINOFF, Nicholas D. See BLOOM, Clifford O.
KEENER, Marvis S. and RIDENHOUR, Jerry R. On the equivalence of oscillations and nondisconjugacy for nth order linear ordinary differential equations, A-137.
KEIGHER, William F. Adjoint monads on symmetric monoidal closed categories, A-80; Differential categories are cotripleable. II. Preliminary report, A-455; Products

of differential schemes. Preliminary report, A-607.
KEISLER, H. Jerome. The number of types in a first order theory. Preliminary report, A-316.
KEISLER, Michael. A characterization of the closed meet-ideals of the cone of a complete ℓ-group, A-435.
KELINGOS, John A. and STAPLES, Phillip O. Every harmonic function in the disk is the Poisson "integral" of its boundary "values", A-120.
KELLER, Joseph B. Forced nonlinear vibrations and perturbed bifurcation theory, A-18.
KELLNER, Richard G. See HAYES, John K.
KELLUM, Kenneth R. Sums and limits of almost continuous functions, A-342; Six types of retracts. Preliminary report, A-622.
KELLY, David and RIVAL, Ivan. Planar lattices, A-46.
KELLY, John B. A combinatorial application of the theory of integral equivalence of matrices, A-35.
KELMAN, Robert B. An analog of the Dirichlet-Jordan theorem for dual Fourier series, A-400.
---. See FEINERMAN, Robert P.
KEMP, Marilyn J. See LUKE, Yudell L.
KENNISON, John. Representing algebras by sections. Preliminary report, A-567.
KENNY, George O. Completion of abelian ℓ-groups. Preliminary report, A-46; Archimedean kernel of a representable ℓ-group. Preliminary report, A-590.
KENT, Darrell C. and RICHARDSON, Gary D. A note on $C(X)$, A-346.
KEOGH, Frank R. See ESSÉN, Matts R.
KERLIN, J. Edward. Representations of generalized multipliers of L^p-spaces of locally compact groups. Preliminary report, A-167.
KERR, Steven D. Simple Lie algebras over fields of characteristic two with some one-dimensional products of root spaces. Preliminary report, A-79.
KERTZ, Robert P. Perturbed semigroup limit theorems with applications to discontinuous random evolutions, A-198.
KESSLER, Irving J. and LIVINGSTON, Marilynn. The expected number of parts in a partition of n, A-49.
KETONEN, Jussi. On almost disjoint sets. Preliminary report, A-557.
KETTNER, James E. Group completing monoidal categories. Preliminary report, A-456.
KHABBAZ, S.A. and TOUBASSI, Elias H. Extensions of abelian groups of finite rank, A-101.
KHALILI, Siamak. A sufficient condition for boundedness of the infinitesimal generator of a strongly continuous group of bounded linear transformations on L_p. Preliminary report, A-443; On the oscillation of the Brownian motion random measure. Preliminary report, A-448.
KHARAGHANI, H. Multiplicative invariant means on weakly almost periodic functions. Preliminary report, A-305.
KILLGROVE, Raymond B. Sylvester-Gallai conjecture does not imply transversal axiom, A-412; Super-Cauchy sequences, A-629.
---. See KOCH, Cheryl.
KILMOYER, Robert W., Jr. Generalized Steinberg characters of finite Chevalley groups. Preliminary report, A-94.
KIM, Dong Sie. Complete domains with respect to the Carathéodory distance, A-307; An open Gleason part, A-539.
KIM, Jin Bai. On a nullity of a product of two linear transformations, A-388.
KIMBERLING, Clark H. Combinatorial identities found by evaluating symmetric functions. II. Preliminary report, A-39.
KIMURA Naoki. See ANDERSON, James A.
KING, J. Thomas. New error bounds for the penalty method and extrapolation, A-313.
KING, Larry. See HANSON, Thomas.
KING, Paul L. Homomorphism-valued metrics, A-207.
KINOSHITA, Shin'ichi. On elementary ideals of projective planes in the 4-sphere and θ-curves in the 3-sphere. Preliminary report, A-347.
KLAASEN, Gene A. Dependence of solutions on boundary conditions, A-136.
---. See DOLAN, J. Michael.
KLEIMAN, Steven L. Hilbert's fifteenth problem: rigorous foundation of Schubert's enumerative calculus, A-566.
KLEINBERG, Eugene M. See ABRAMSON, Fred G.
KLEINFELD, Margaret H. More on a generalization of commutative and alternative rings. Preliminary report, A-4.
KLEITMAN, Daniel J. Degree sequences and trees, A-390.
KLEPPNER, Adam. Non type I representations of abelian groups, Preliminary report, A-169.
KLUVÁNEK, Igor. A measure whose range contains a ball in ℓ_2. Preliminary report, A-539.
KNIGHT, Melvin J. Indices of principal orders over the rationals. Preliminary report, A-524.
KNIGHT, Ronald A. Characterizations of certain continuous flows, A-129.
KNILL, Ronald J. The Lefschetz fixed point theorem for compact groups. Preliminary report, A-225.
KNOBLAUCH, Tom. Imbedding deleted 3-manifold neighborhoods in E^3. Preliminary report, A-326.
KNOBLAUCH, T. and LACHER, R.C. The non-cellular points of a map between odd-dimensional manifolds, A-562.
KNOEBEL, R. Arthur. Unitary post algebras. Preliminary report, A-635.
KNOP, Larry E. Sufficient conditions for the solvability of factorizable groups. Preliminary report, A-85; Non-Abelian simple groups are not B-groups. Preliminary report, A-456.
KNOWLES, Robert. A finiteness property of l.c.s. Preliminary report, A-612.
KOBAYASHI, Shoshichi. Intrinsic distances, measures and geometric function theory, A-128.
KOCH, Cheryl and KILLGROVE, Raymond B. Algebraic conics in arbitrary projective planes. Preliminary report, A-411.
KOCH, Richard M. and LOWENTHAL, Franklin. Uniform finite generation of three dimensional linear Lie groups, A-110.
KOEHLER, Donald O. A characterization of hermitian operators on commutative b* algebras. Preliminary report, A-197.
KOHLER, Werner E. Coupled power equations for stochastic systems with propagating and evanescent modes. Preliminary report, A-402.
KOMKOV, Vadim. Legendre transformation applicable to thin plate theory, and corresponding variational principles, A-249.
KOO, Shu-Chung. Transitivity of transformation groups in hyperspaces. Preliminary report, A-326.
KOOPMANS, Lambert H., PATHAK, P.K., MARTIN, Nancy M. and QUALLS, Clifford R. On the divergence of a certain random series, A-238.
KORANYI, Adam. Poisson integrals and boundary components of symmetric spaces, A-110.
KOSCHORKE, Ulrich. Bordism of immersions and k-mersions, A-17; Singularities and bordism of (integrable) q-plane fields, A-231; Rational bordism of frame fields, immersions and k-mersions, A-405; Existence and classification of framefields, A-508; Framefields with finite singularities, A-563.
KOSTKA, David G. Lower class sequences for the Skorohod-Strassen approximation scheme, A-235.
KOTTMAN, Clifford A. $(1+\epsilon)$-separated subsets of the unit ball, A-178.
KOTTMAN, Clifford and GAGLIARDO, Emilio. Orientation-preserving homeomorphisms of the plane which interchange two points have fixed points, A-508.
KRAFT, Richard. Gronwall inequalities related to hyperbolic initial-boundary problems, A-152.
KRAMER, Earl S. and MESNER, Dale M. t-designs on hypergraphs, A-527; Admissible parameters for Steiner systems $S(t,k,v)$ with a table for all $(v-t) \leq 498$, A-588.
KRANZLER, Stanley K. See McDERMOTT, Terrence S.
KREIMER, H.F. and COOK, Paul M. II. The existence of a normal basis in certain Galois extensions of commutative rings. Preliminary report, A-607.
KREISEL, George. What have we learnt from Hilbert's Second Problem?, A-462.
KREYSZIG, Erwin O. Remark on the normal distribution, A-14; On a class of space curves in affine differential geometry, A-314; Equiareal mapping of surfaces, A-378;

Representation of a Bergman kernel, A-438; Explicit representation of an integral operator, A-489; An equation involving a solution of Liouville's equation, A-536.
KRIER, Nicholas. The existence of involutorial elations and homologies in a projective plane, A-203.
KRIETE, Thomas L. Canonical models and self-adjoint parts of dissipative operators, A-534.
KRISHNAN, V. Sankrithi. Duality. Preliminary report, A-567.
KRONK, Hudson V. E. See GELLER, Dennis P.
KRONK, Hudson V. E. and RADLOWSKI, M. and TRANEN, B. On the line-chromatic number of triangle-free graphs. Preliminary report, A-291.
KRUEGER, Robert J. The inverse problem for a dissipative medium, A-250.
KRUSE, Arthur H. Classes of big classes, A-29.
KRUSKAL, Martin D. See GARDNER, Clifford S.
KRZYWOBLOCKI, Maria Z. v. Association of Schroedinger equation (quantum) with von Kármán-Howarth equation (deterministic, macroscopic), A-460.
KU, Hsu-Tung and KU, Mei-Chin. Dimension of an isometry group, A-565.
KU, Mei-Chin. See KU, Hsu-Tung.
KUBERT, Daniel S. Universal bounds on the torsion of elliptic curves. Preliminary report, A-292; Torsion of elliptic curves, A-482.
KUIPER, Hendrik J. Some nonlinear boundary value problems, A-151.
KUIPERS, Lawrence. Uniform distribution in the ring of Gaussian integers, A-52.
KUJALA, Robert O. Generalized Blaschke conditions on the unit ball in $\mathbb{C}^p$, A-127.
KULKARNI, Ramesh M. Algebraic relationships that yield subnormality, A-399.
KULKARNI, Ramesh M. and LADDE, Gangaram S. Stochastic perturbations of nonlinear systems of differential equations. Preliminary report, A-134.
KUMMER, Martin. An interaction of three resonant modes in a nonlinear lattice. Preliminary report, A-248.
KUO, Hui-Hsiung. Integration by parts for abstract Wiener measures. Preliminary report, A-116.
KUO, Tsang-Hai. On conjugate Banach spaces with the Radon-Nikodým property, A-375; Weak convergence of vector measures on F-spaces. Preliminary report, A-444.
KUO, T. C. and LU, Yung-Chen. Sufficiency on Weierstrass jets in $J^k(2,1)$, A-233.
KUPERBERG, Krystyna. A note on the Hurewicz isomorphism theorem in Borsuk's theory of shape, A-452; Two Vietoris isomorphism theorems in Borsuk's theory of shape, A-503.
KURSHAN, Robert P. and GOPINATH, Bhaskarpillai. Fixed-point functions with periodic iterations, A-203.
KURTZ, Lawrence A. Properties of a semidiscrete approximation to a two-dimensional partial differential equation. Preliminary report, A-344.
KURTZ, Lynn C. Unique Hahn-Banach extensions and Korovkin's theorem, A-187.
KURTZ, Thomas G. Semigroups of conditioned shifts and approximation of Markov processes, A-237.
KUTTLER, James R. Sloshing frequencies by finite differences, A-243.
KUTZKO, Philip C. On the cyclotomy of finite commutative PIR's, A-57.
KUZANEK, Jerry F. Isoperimetric sloshing problems with nonlinear side conditions. Preliminary report, A-200.
KYDES, Andy S. Pseudo-Chebyschev solution of n + 1 inconsistent linear equations in n unknowns, A-378.
---. See TEWARSON, Reginald P.
LACEY, H. Elton. See BERNAU, S. J.
LACHER, R. C. See BRYANT, J. L.
---. See GEOGHEGAN, Ross.
---. See KNOBLAUCH, T.
LACHLAN, Alistar H. The number of models of an ω-stable theory, A-447.
LADA, Thomas. See MALRAISON, Pierre.
LADAS, Gerasimos E. Oscillatory effects of retarded actions. Preliminary report, A-308.
LADDE, Gangaram S. Differential inequalities and stochastic functional differential systems. Preliminary report, A-132; Systems of differential inequalities and stochastic differential equations. I. Preliminary report, A-394.
---. See BERNFELD, Stephen R.
---. See KULKARNI, Ramesh M.
LADNER, Richard E., LYNCH, Nancy and SELMAN, Alan L. A comparison of polynomial-time bounded reducibilities. Preliminary report, A-312.
LADY, Everett Lee. Finite rank torsion free abelian groups, A-98.
---. See BREWER, James W.
LAGINESTRA, Anthony V. and BOYCE, William E. On convergence and evaluation of sums of reciprocal powers of eigenvalues for certain operators on a Hilbert space which are meromorphic functions of the eigenvalue parameter. Preliminary report, A-401.
LAGNESE, John E. Singular perturbations in a class of nonlinear abstract equations, A-145.
LAKEIN, Richard B. Computation of the ideal class group of fields quadratic over $Q(\rho)$. Preliminary report, A-55.
LAKSER, H., PADMANABHAN, R. and PLATT, C. R. Regular identities and finite basis property, A-528.
LAKSHMIKANTHAM, V. See ASNER, Bernard A., Jr.
---. See BERNFELD, Stephen R.
---. See EISENFELD, Jerome.
LAKSHMIKANTHAM, V. and LEELA, S. On perturbing Lyapunov functions. Preliminary report, A-393.
LAKSHMIKANTHAM, V., DRIVER, Rodney D. and BERNFELD, Stephen R. Uniqueness results for ordinary differential equations, A-140.
LALLEMENT, Gerard J. Embedding of semigroup amalgams. Preliminary report, A-105.
LAM, T. Y. Series summation of stably free modules, A-591.
LaMARTIN, W. F. Pontryagin duality for abelian k-groups. Preliminary report, A-619.
LAMBRINOS, Panayotis Th. Generalised boundedness topological concepts. Preliminary report, A-504.
LAMEIER, S. H. and MERKES, E. P. On domains of univalence for certain meromorphic functions, A-609.
LANG, Serge. Higher dimensional diophantine problems, A-388.
LANGFORD, Eric. See ALIPRANTIS, Charalambos D.
LANSKI, Charles P. Regularity and quotients in rings with involution, A-69.
LARSON, Roland E. Algebraic aspects of homogeneous topologies, A-210.
LaSALLE, Margaret M. Automata and solvability. Preliminary report, A-641.
LASKAR, Renu. Partial geometry of dimension three. Preliminary report, A-34.
---. See AUERBACH, Bruce.
LATCH, Dana May. On the algebraic topology of small categories. Preliminary report, A-81.
LATORRE, Donald R. Semilattices of bisimple left unipotent semigroups, A-91; Semilattices of bisimple orthodox semigroups, A-606.
LAU, A. Y. W. Semilattices on the two-cell. Preliminary report, A-95.
LAU, Ka-Sing. Extreme operators on L^1 spaces. Preliminary report, A-188.
LAVOIE, J. L. See SRIVASTAVA, H. M.
LAWRENCE, David S. Sufficient conditions for connectivity of real-valued functions, A-328; Dynamic metagames of static games. Preliminary report, A-497.
LAWRENCE, John. Primitive free algebras. Preliminary report, A-521.
---. See GOODEARL, K.
LAWSON, Jimmie D. Boundaries of monoid manifolds. Preliminary report, A-112.
LAWSON, J. D. and MADISON, B. L. Sectional mappings. Preliminary report, A-618.
LAZAR, A. J. See GLEIT, A.
LAZAROV, Connor and PASTERNACK, Joel S. Exotic characteristic classes for Riemannian foliations. Preliminary report, A-12.
LAZER, Alan C. A Liapunov theorem for weakly nonlinear systems not necessarily Hamiltonian, A-144.
LEACH, Ronald J. Multivalent Bazilevic functions, A-121.
LEBOWITZ, Aaron, Degeneration of a four-sheeted

Riemann surface of genus one, A-121.
LEE, Jong P. Isotopy classifications of the isotropy groups of annulus, A-221.
LEE, Lawrence A. A note on chromatic equivalence. Preliminary report, A-34.
LEECH, Jonathan E. The D-category of a semigroup, A-88.
LEELA, S. Stability of measure differential equations. Preliminary report, A-135.
---. See LAKSHMIKANTHAM, V.
van LEEUWEN, L.C.A. See JENKINS, Terry L.
LEHMAN, Eugène H. Distribution asymptotique de la statistique de Finkelstein et Schafer. Preliminary report, A-233.
LEHMER, Derrick H. See BRILLHART, John
LEHNER, Joseph. The boundedness of integrable automorphic forms, A-437.
LEIH, Thomas James. Operator characterizations of $L_p(\mu)$ spaces and a generalization of a theorem of Grothendieck, A-181.
LEIPNIK, Roy B. Quadratic differential equations, A-411.
LEITMAN, M.J. and MIZEL, Victor J. Hereditary laws and nonlinear integral equations. Preliminary report, A-173.
LELAND, Kenneth O. A direct approach to the theory of the degree of a mapping, A-331.
LEONARD, Philip A. Strong starters in cyclic groups, A-34; The septic character of 2,3,5, and 7, A-287.
LEONARD, Philip A. and WILLIAMS, Kenneth S. The cyclotomic numbers of order seven, A-1; The cyclotomic numbers of order eleven, A-363.
LEPSON, Benjamin. See DAVIS, Charles S.
LEPSON, Benjamin and DAVIS, Charles S. Entire functions of bounded index, bounded value distribution, and bounded l-index, A-398.
LERMAN, Manuel. Quotients of the lattice of α-recursively enumerable sets by ideals of generalized finite sets, A-500.
LESNIAK, Linda. Results on the edge-connectivity of graphs, A-33.
LEUNG, Anthony W. Lateral connections for asymptotic solutions of higher order turning points in unbounded domains. Preliminary report, A-132.
LEVARO, Richard A. The projectivity of $\widetilde{R}$ in its category of modules, A-59.
LEVIN, Gerson. A change of rings theorem for Tor, A-485.
LEVINE, Jack. See BRAWLEY, Joel V.
LEVINE, Lawrence E. and LUBOT, Eric. A remark on time scales. Preliminary report, A-391.
LEVY, Ronnie Fred. Showering spaces. Preliminary report, A-325.
LEWANDOWSKI, Zdzisław, ZŁOTKIEWICZ, Eligiusz, and MILLER, Sanford S. On some classes of starlike functions. Preliminary report, A-374.
LEWIS, James T. Restricted range approximation and its application to digital filter design, A-160.
LEWIS, John A. See MORRISON, John A.
LEWIS, John L. See GARIEPY, Ronald F.
LEWIS, Lawrence G. A conformally invariant boundary using extremal length. Preliminary report, A-125.
LEWIS, Paul W. See BROOKS, James K.
LEWIS, Roger T. The oscillation of selfadjoint, fourth order, linear differential operators, A-7.
LEWIS, William James and SHORES, Thomas S. Linear modules and their endomorphism rings, A-59.
LIANG, David Shien. Toeplitz operators on compact symmetric spaces. Preliminary report, A-340.
LIEB, Elliott H. See RUSKAI, M. Beth
LIM, M.H. Transformations on symmetry class of tensors. Preliminary report, A-485.
LIM, Teck-Cheong. A fixed point theorem for multivalued nonexpansive mappings in a uniformly convex Banach space, A-302.
---. See TAN, Kok-Keong.
LIN, Bor-Luh. See CASAZZA, Peter G.
LIN, Chung. Rearranging Fourier transforms on groups. Preliminary report, A-492.
LINDGREN, William F. Every regular semistratifiable wN-space is a Nagata space, A-504.
---. See HEATH, R.W.
LINDGREN, William F. and FLETCHER, Peter. $w\Delta$ spaces. Preliminary report, A-505.
LINDNER, Charles C. and ROSA, Alexander. Construction of large sets of almost disjoint Steiner triple systems, A-30.
LINDSEY, Diana and MADISON, Bernard. Congruences on certain subsemigroups of Baer-Levi semigroups. Preliminary report, A-633.
LIOSATOS, Gerassimos. Qualitative behaviour of solutions of nth order differential equations. Preliminary report, A-8.
LIPKIE, Curtis and BALLEW, David W. A new approach to the Lagrange interpolation formula, A-312.
LIPKIN, Leonard J. On the operator $L = \Delta r^2 = \mu(\partial/\partial r)r + \lambda$, A-340.
LIPSCOMB, Stephen Leon. On imbedding finite-dimensional metric spaces, A-326.
LIPSHITZ, Leonard. Commutative regular rings with integral closure, A-13.
LIPSMAN, Ronald L. The unitary representation given by the invariant integral on a semisimple Lie algebra, A-110.
LITTMAN, Walter. See FABES, Eugene B.
LIU, Hal. Characterization of linear groups.I, A-100.
LIU, Tai-Ping. The Riemann problem for the equations of gas dynamics. Preliminary report, A-7; The uniqueness theorem of the Cauchy problem for general 2 x 2 conservation laws. Preliminary report, A-536.
LIVINGSTON, Albert E. See HALLENBECK, David J.
LIVINGSTON, Marilynn. See KESSLER, Irving J.
LO, Siu Kwong. See NIEDERREITER, Harald.
LOEB, Henry L. and WERNER, Helmut. Optimal numerical quadratures in H^p spaces. Preliminary report, A-159.
LOEBL, Richard I. A Hahn decomposition for linear maps, A-190.
LOEBL, Richard I. and MUHLY, Paul S. Flows on von Neumann algebras. Preliminary report, A-495.
LOHMAN, Robert H. Some sequence spaces constructed from Banach spaces with bases. Preliminary report, A-174.
LONERGAN, Francis D. A class of interchangeable links of multiplicity two. Preliminary report, A-16.
LONG, Andrew F. and VAUGHAN, Theresa P. Factorization of Q(h(x)) where Q(x) is irreducible over GF(q) and h(x) is linear, A-58.
LONGYEAR, Judith Q. Your favorite combinatorial object, reconsidered as a tactical configuration, A-32; Patterns: The structure of linear homogeneous sets, A-293.
LORD, Graham. Almost perfect biunitary numbers, A-53.
LORD, H.M. Hull operators on a category of spaces of continuous functions on Hausdorff spaces, A-175.
LORENTZ, G.G. Hilbert's thirteenth problem: Representation of functions in terms of functions of a smaller number of variables, A-510.
LOVÁSZ, L. and PLUMMER, Michael D. On bicritical graphs, A-32.
LOVELADY, David L. An admissibility implication for linear ordinary differential equations, A-133; Linear evolution operators and the embedding of time-dependent problems into semigroup theory, A-338; Oscillation in even order linear differential equations, A-615.
LOWENTHAL, Franklin. See KOCH, Richard M.
LU, Yung-Chen. See KUO, T.C.
LUBIN, Arthur R. Concrete model theory for a class of operators with unitary part. Preliminary report, A-192.
LUBOT, Eric. See LEVINE, Lawrence E.
LUCAS, Thomas R. Some interpolation (characterization) type results for cubic (bicubic) splines with applications to boundary value problems. Preliminary report, A-612.
LUCHINS, Edith H. and MASTAN, Kathleen C. Quasi-nilpotent and nilpotent operators, A-62.
LUEDER, Kenneth A. Derivability in the irregular near-field planes, A-203.
LUKE, Yudell L. On the error in the Padé approximants for a form of the incomplete gamma function including the exponential function, A-458.
LUKE, Yudell L. and WHITAKER, Rick. Comparison of rational approximations. Preliminary report, A-458.
LUKE, Yudell L., TING, Bing Y. and KEMP, Marilyn J.

On generalized Gaussian quadrature, A-460.
LUM, Lewis. A characterization of local connectedness in dendroids, A-215; Order preserving and monotone retracts of a dendroid, A-504.
LUNING, Charles. A topological algebra for the observables of a quantum field. Preliminary report, A-251.
---. See PERRY, William L.
LUSK, Ewing L. The Mod p Smith index and a generalization of the Borsuk-Ulam theorem. Preliminary report, A-463.
---. See COHEN, Frederick R.
LUTZ, Donald A. See HARRIS, William A., Jr.
LYNCH, Nancy. See LADNER, Richard E.
LYNN, Roger Y. Some examples of singularly perturbed boundary value problems with turning points, A-398.
MACBAIN, John. Global bifurcation theorems for noncompact operators. Preliminary report, A-194.
MACFARLANE, Andrew. Topological objects in topoi. Preliminary report, A-291.
MACGREGOR, Thomas H. See FENG, Jinfu.
MACINTYRE, Angus. On existentially complete Lie algebras. Preliminary report, A-379.
MACINTYRE, Angus and SARACINO, Daniel. On existentially complete nilpotent Lie algebras. Preliminary report, A-379.
MACK, John. Compactly generated, completely regular spaces. Preliminary report, A-221.
MACKLIN, M. See WOJTKOWSKI, Waclaw G.
MACLEOD, R.A. See BRENNER, J.L.
MAC NERNEY, J.S. Finitely additive set functions. (I) Order-characterization of a prering of subsets of a set, A-342; Finitely additive set functions. (II) Linear operations on a space of functions of bounded variation, A-636.
MACQUEEN, David B. A note on the envelope of a type n + 2 object. Preliminary report, A-23.
MADISON, B.L. See LAWSON, J.D.
---. See LINDSEY, Diana.
MADYCH, Wolodymyr R. Iterated Littlewood-Paley functions and a multiplier theorem. Preliminary report, A-163.
---. See ALLEN, Graham D.
MAGILL, Kenneth D., Jr., and SUBBIAH, S. Green's relations for regular elements of semigroups of endomorphisms. Preliminary report, A-88.
MAGLIVERAS, Spyros S. On transitive extensions of the Higman-Sims group. Preliminary report, A-366.
MAH, Peter F., NAIMPALLY, S.A. and WHITFIELD, John H.M. Linearization of a convexity structure. Preliminary report, A-315.
MAHER, Laurence P., Jr. A function which transforms certain nonlinear graphs into straight lines, for simultaneous solution and other purposes, A-158.
MAHONY, Louie M. Diffeomorphisms of plumbed four-dimensional manifolds, A-329; The topology of the finite general linear group, A-383.
MAHOWALD, Mark. See DAVIS, Donald M.
MAIA, Marcus Duarte. Spinor geometry in pseudo Euclidean spaces. Preliminary report, A-311.
MAKAN, Amirali. On Lockett's ordering of the fitting classes, A-104.
MAKKAI, Michael. Applications of a theorem on weak definability in $L_{\omega_1\omega}$, A-21; Applications of a theorem on weak definability in $L_{\omega_1\omega}$. II, A-318.
MAKOWSKY, Johann Andreas. More about continuous quantifiers. Preliminary report, A-321.
MALEK, Eugene. See GROVER, John Moss.
MALLET-PARET, John. Fixed points and periodic orbits of generic functional differential equations. Preliminary report, A-136.
MALLOWS, Colin L, SLOANE, Neal J.A., and ODLYZKO, Andrew M. Upper bounds for modular forms, lattices, and codes, A-432.
MALONE, J.J. See GRAVES, J.A.
MALRAISON, Pierre and LADA, Thomas. Categories of triple algebras. Preliminary report, A-222.
MALVIYA, Banshi D. Some results on A*-algebras. Preliminary report, A-183.
MANASTER, Alfred B. See HAY, Louise.
MANCUSO, Vincent J. Expansion and dimension, A-213.
MANDELBERG, Kenneth I. See EVANS, Trevor.
MANDL, Robert. On the sum and the average of the first n primes, A-54.
MANOCHA, Jitendra N. σ-noetherian rings, A-297; A generalization of finite dimensionality for modules, A-474.
MANOUGIAN, Manoug N. See KARTSATOS, Athanassios G.
MANVEL, Bennet. Reconstructing graphs from their sets of subgraphs. Preliminary report, A-38.
MARATHE, Kishore B. Cauchy problem for the generalized field equations of gravitation. Preliminary report, A-252.
MARCUM, Howard J. On the hyperspace of geometric spheres in a sphere, A-564.
MARCUS, Marvin. Aspects of the numerical range, A-631.
MARCUS, Marvin and ALI, M. Shafqat. Congruence maps and derivations, A-65.
MARKHAM, Thomas L. Products of inverses of M-matrices. Preliminary report, A-289.
MARON, M.J. See CHILDS, S.B.
MARTIN, Donald A. Hilbert's First Problem, A-462.
MARTIN, Harold. See BENNETT, Harold R.
MARTIN, Nancy M. See KOOPMANS, Lambert H.
MARTIN, Robert P. Tensor products of principal series, A-171.
MARTINEZ, Jorge. Structure of archimedian ℓ-groups using the hyper-archimedean kernel sequence. Preliminary report, A-42; Nilpotent ℓ-groups are representable. Preliminary report, A-604.
MARXEN, Donald J. Free uniform semigroups and free uniform groups, A-107.
MASAT, Francis E. Right simple elements in a semigroups, A-386; Reflexive subsemigroups in a regular semigroup. Preliminary report, A-456.
MASAT, Francis E., MIENTKA, Walter E. and MEYER, Robert A. A semisemester approach to introductory mathematics, A-453.
MASOOD, M. Abu. See GHOSHAL, Sudhanshu Kumar.
MASSAM, H., and ZLOBEC, Sanjo. Various definitions of the derivative in mathematical programming, A-377.
MASSEY, Frank J. III. Analyticity of solutions to a class of nonlinear partial differential equations. Preliminary report, A-152.
MASTAN, Kathleen C. See LUCHINS, Edith H.
MATIJEVIC, Jacob. The maximal ideal transform of a local ring. Preliminary report, A-477.
MATKOWSKY, Bernard J. Boundary layer problems exhibiting resonance, A-131.
MATKOWSKY, Bernard J. and PUTNIK, Leonard J. Uniqueness in the dynamic buckling of elastic plates, A-143.
MATTSON, H.F., Jr. See ASSMUS, E.F., Jr.
MAULDIN, Dan. On the measurability of the continuum, A-447.
---. See BRECHNER, Beverly L.
MAULDIN, Richard D. The continuum hypothesis, integration and duals of measure spores, A-306; On generalized rectangles and countably generated families. Preliminary report, A-376.
MAXFIELD, John E. See CHAWLA, Lal M.
MAXSON, Carlton J. Semigroups of order preserving partial transformations on trees, A-86.
---. See NATARAJAN, Ponnammal.
MAXWELL, James W. Regular neighborhoods of immersed manifolds, A-328.
MAYNE, Joseph H. Derivations of degree two algebras, A-78.
MUZUMDAR, Tapas. A regularity result concerning degenerate coercive evolution equations with variable domain, A-146.
McADAM, Stephen J. Going down and open extensions. Preliminary report, A-455.
McALISTER, Donald B. On the structure of inverse semigroups, A-90.
---. See McFADDEN, Robert.
McAULEY, Patricia. See EDWARDS, David.
McCALLUM, William A. A modular representation of the spun trefoil knot, A-226.
McCANDLESS, Byron H. On Σ-finite families, A-216.
McCARTHY, Donald J. Automorphism groups of separable graphs, A-39.
McCARTY, Carl P. Analytic functions with initial zero

coefficients. Preliminary report, A-309; Some classes of analytic functions. Preliminary report, A-487.
McCLEARY, Stephen H. The structure of intransitive ordered permutation groups, A-44; The structure of ordered permutation groups applied to lattice-ordered groups, A-336.
McCLURE, Donald E. Asymptotic analysis of optimal and efficient interval partitioning, A-160.
McCORMICK, S. F. and RODRIGUE, Garry. A uniform approach to gradient methods for linear operator equations, A-193.
McCOY, Peter A. Value distribution of generalized axisymmetric elliptic functions, A-146.
McDANIEL, Wayne L. See HAGIS, Peter, Jr.
McDERMOTT, Terrence S. and KRANZLER, Stanley K. Continuous extension of sequentially continuous linear functionals in inductive limits of normed spaces, A-183.
McDONALD, Bernard R. Simple subrings of a matrix ring over a finite field, A-599.
McDOWELL, Kenneth P. Pseudo-Noetherian rings, A-367.
McFADDEN, Robert and McALISTER, Donald B. Zigzag representations and inverse semigroups, A-106.
McGAVRAN, Dennis. T^3-actions on simply connected 6-manifolds, A-406.
McINTOSH, Alan G. R. and EVANS, Bruce. Square roots of sectorial operators. Preliminary report, A-459.
McKENNON, Kelly. Analytic distributions, A-185.
McKIM, James C., Jr. On spaces whose boundaries are spheres, fake spheres, or Euclidean spaces, A-231.
McLAUGHLIN, H.W. See GILLOTTE, Michael J.
McLAUGHLIN, Harry W. and SOMERS, Kay B. Characterizations of generalized strong unicity in approximation theory, A-157.
McLAUGHLIN, T.G. Degrees of unsolvability and strong forms of $A_R + A_R \subsetneq A_R$, A-18.
McLEOD, J.B. and SATTINGER, David H. Loss of stability and bifurcation at a double eigenvalue, A-181.
McMAHON, Douglas. Weakly mixing minimal transformation group. Preliminary report, A-218.
McMORRIS, Fred R. See ESTABROOK, G. F.
McNULTY, George. Three results about universal Horn sentences. Preliminary report, A-25.
McVOY, W.S. See RUBEL, Lee A.
MEEKER, Loren D. and BURNS, Tom. A dynamic model of multidimensional evaluation and social choice. Preliminary report, A-254.
MEGIBBEN, Charles K. Mixed abelian groups, A-101.
MEJIA, Raymond. See TEWARSON, Reginald P.
MELIS, Erica. Definability in certain nonclassical logics. Preliminary report, A-12.
MEMAURI, Haghdad. On restricted right subdirectly irreducible rings. Preliminary report, A-482.
MENDELSOHN, N.S. Commutators in free groups, A-290.
MENDELSOHN, N.S. and PADMANABHAN, R. Minimal identities for Boolean groups, A-363; Some varieties of quasi-groups with finite basis property, A-528.
MENZALA, Gustavo Perla. The S-matrix for the Klein-Gordon equation with an external potential. Preliminary report, A-540.
MERKES, E.P. See LAMEIER, S.H.
MERSEL, Jonathan. The shape of periodic solutions of planar differential systems, A-136.
MERTENS, John R. See HAMILTON, Wallace L.
MESNER, Dale M. See KRAMER, Earl S.
METAKIDES, George. See NERODE, Anil.
METT, Coreen L. Sturm comparison theorems for systems of second order elliptic partial differential equations, A-399.
MEYER, Gunter H. Parabolic free boundary problems. Preliminary report, A-244.
MEYER, Paul R. Lattice operations on metric and order topologies, A-220.
MEYER, Robert A. The number of solutions of a system of congruences, A-481.
---. See MASAT, Francis E.
MEYERS, Glenn. The evaluation of integrals involving products of Bessel functions by way of Bennett functions. Preliminary report, A-129.
MIENTKA, Walter E. See MASAT, Francis E.
MILES, Frank B. Compact totally disconnected sets which contain K-sets, A-165.
MILLAR, Terrence S. Recursively presented models. Preliminary report, A-550.
MILLER, Douglas E. Remarks on the transform $B^* = \{x: \{g: gx \in B\} \text{ is comeager}\}$, A-319.
---. See BURGESS, John P.
MILLER, James E. On the maximum modulus for meromorphic univalent functions, A-398; Subordinating factor sequences for convex maps in C^n, A-614.
MILLER, Kenneth S. Some multivariate complex distributions, A-382.
MILLER, Maurice Hugh, Jr. Equivalence of connected and Darboux functions under closure. Preliminary report, A-347; Equivalence of almost continuous and Darboux functions under closure. Preliminary report, A-620.
MILLER, Richard K. Preservation of uniform asymptotic stability. Preliminary report, A-172.
MILLER, Richard K. and NOHEL, John A. A stable manifold theorem for a system of Volterra integrodifferential equations. Preliminary report, A-141.
MILLER, Richard T. See EDWARDS, Robert D.
MILLER, Robert W. On V-dominant dimension. Preliminary report, A-77.
MILLER, Sanford S. See LEWANDOWSKI, Zdzisław.
MILLER, Sanford S. and MOCANU, Petru T. The Hardy class of functions of bounded argument rotation, A-301; The H^p classes for alpha-convex functions. II. Preliminary report, A-371.
MILLER, Sanford S., MOCANU, Petru T. and READE, Maxwell O. The Hardy classes for functions in the class $MV[\alpha,k]$. Preliminary report, A-10.
MILLETT, Kenneth C. Fibered geometric topology. Preliminary report, A-228.
MILLMAN, Richard. Normal degree of immersions. Preliminary report, A-207.
MILLS T.M. and VARMA, Arun Kumar. A new proof of A.F. Timan's and Teleyakovskiis's approximation theorem, A-159; The approximation of functions by algebraic polynomials, A-613.
MILTON, E.O. Fourier transforms of odd and even tempered distributions, A-395.
---. See CARMICHAEL, Richard D.
MINDA, Carl David. Rings of holomorphic and meromorphic functions on subsets of Riemann surfaces, A-492.
MINES, Ray. Completions of abelian groups, A-98.
MIRANDA, Edward J. and FRECHEN, Joseph B. Validity of computer calculations. Preliminary report, A-257.
MIRSKY, Norman D., SARIO, Leo and WANG, Cecilia Y. Parabolicity and existence of bounded or Dirichlet finite polyharmonic functions, A-126.
MISLOVE, Michael W. See HOFMANN, Karl H.
MISNER, John. See BOND, James W.
MITCHELL, A. Richard and MITCHELL, Roger W. Asymptotic equilibrium in Banach spaces. Preliminary report, A-393.
MITCHELL, Barry M. Some applications of module theory to functor categories, A-82.
MITCHELL, Roger W. See MITCHELL, A. Richard.
MITCHEM, John A. Every planar graph is acyclically 8-colorable, A-2.
MIURA, Robert M. See GARDNER, Clifford S.
MIZEL, Victor J. See LEITMAN, M.J.
MOCANU, Petru T. See READE, Maxwell O.
MOCANU, Petru T. See MILLER, Sanford S.
MOCK, Betty. On lumping of finite element matrices. Preliminary report, A-550.
MOHLER, Lee. The fixed point property for homeomorphisms of 1-arcwise connected continua, A-565.
MOLLIN, Richard A. Some results on the group of algebras with uniformly distributed invariants, U(K). Preliminary report, A-368.
MOLNAR, Richard K. Smash coproducts. Preliminary report, A-72.
MOLNAR, Suzanne M. See GRAVES, William H.
MONROE, Itrel. Embedding semimartingales in Brownian motion, A-237.
MONTGOMERY, Hugh L. Problems of prime numbers, A-458.
MOON, John W. and SOBEL, Milton. The number of nested-with-recombination group testing procedures. Preliminary report, A-41.

MOORE, Elmo. Generalizations of Euler's partition identity, A-50.
MOORE, J. Douglas. Functorial topologies and relative homological algebras, A-98.
MOORE, Robert H. See NASHED, M. Zuhair.
MOREL, Anne C. Locally cyclic algebras. Preliminary report, A-47.
MOREMAN, Douglas. Convex topology. Preliminary report, A-342; Convex hull-specific transformations in convex topology. Preliminary report, A-371; Convexity specific functionals in convex topology. Preliminary report, A-442.
MORGAN, John C. II. The absolute Baire property. Preliminary report, A-29.
MORITZ, Roger H. A class of Lototsky methods of summability, A-155.
MORLEY, Michael D. and SOARE, Robert I. Boolean algebras, splitting theorems, and Δ^0_2 sets, A-317.
MORRELL, Joseph S., HUTTON, C. V. and RETHERFORD, James R. Approximation numbers and Kolmogoroff diameter operators. Preliminary report, A-188.
MORRIS, Howard Cary. Unions of convexly disjoint sets, A-315; Two pigeon hole principles, A-363.
MORRIS, S. Brent. The generalized faro shuffle, A-292; Generalized permutation enumerants, A-370; The generalized faro shuffle in q-dimensions, A-473; Generalized inversions and Dedekind sums. Preliminary report, A-602; The group structure determined by permutations derived from card shuffling, A-632.
MORRIS, Sidney A., HUNT, David Christopher, and Van der POORTEN, Alfred J. Closed subgroups of products of reals, A-450.
MORRIS, William L. Matrix factorizations and their associated condition number, A-631.
MORRISON, John A. and LEWIS, John A. Charge singularity at the corner of a flat plate. Preliminary report, A-125.
MOTHON, Bernard. On series in nonarchimedian analysis. Preliminary report, A-8.
MOTT, Joe L. Groups of divisibility and symmetric algebras. Preliminary report, A-334.
MOZZOCHI, C. J. The foundations of analysis: Landau revisited, A-594.
MROWKA, Stanislaw G. Strong 0-dimensionality of some spaces. Preliminary report, A-408.
MUCKENHOUPT, Benjamin and WHEEDEN, Richard L. Two weight function norm inequalities for the Hardy-Littlewood maximal function, A-171.
MUELLER, Bruno J. Nondegenerate Morita contexts, A-75.
MUHLY, Paul S. Centered operators; recent developments, A-190.
---. See LOEBL, Richard I.
MUKHERJEA, Arunava and TSERPES, Nicolas A. Symmetric random walks on semigroups. II. Preliminary report, A-234.
MUKHERJEE, Rathindra N. Deficiency subspaces of maximally symmetric singular integral operators, A-194; A Hille-Yoshida-Phillips type of theorem for semigroups in a locally convex space. Preliminary report, A-397.
MUKHERJEE, Rathindra N. and BHATTACHARYA, Dipendra N. Stieltjes transform of functions satisfying the Lipschitz condition. Preliminary report, A-341.
MUKHERJEE, Some N. On nonassociative topological algebras, A-78.
MUKHERJEE, Sukla. See DEBNATH, Lokenath.
MUKHERJEE, T. K. On hypercompletions. Preliminary report, A-493.
MULDOWNEY, James S. An inequality of Čaplygin and Pólya, A-623.
MULLEN, Gary L. Equivalence classes of polynomials over finite fields. Preliminary report, A-290.
MULLER, G. M. Interpolation and approximation by uniform translates, A-540.
MULLIN, Albert A. On the geometry of prime numbers and its applications. Preliminary report, A-1; More on the geometry of prime numbers. Preliminary report, A-291; On the geometry of recursively enumerable sets and degrees. Preliminary report, A-380; On specially structured primitive polynomials over UFD's. Preliminary report, A-474; A note on generalized multiplicative functions, A-519; Topological methods in number theory. Preliminary report, A-587.
MULLIN, Melvin R. On the invariance of wave operators. Preliminary report, A-538.
MURLEY, Charles E. See ARNOLD, David M.
MURPHY, Grattan P. A metric characterization of complete convex subsets of R^1. Preliminary report, A-217.
MYERS, Dale. The Boolean algebra of the theory of linear orders. Preliminary report, A-555.
MYHILL, John. Relevant implication. Preliminary report, A-26.
NAIMPALLY, S. A. See MAH, Peter F.
NAJAR, Rudolph M. Fixed points of an arithmetic function. Preliminary report, A-49.
NAKANO, Hidegoro. A correct set theory, A-29.
NAOUM, Adil G. and SALLOUM, R. M. Annihilators of ideals in commutative Artinian rings, A-366.
NAPARSTEK, Abraham. See DeKLEINE, Herbert Arthur.
---. See SAMPSON, Gary.
NARAYAN, Jack. See STENGLE, Gilbert.
NARAYANASWAMI, P. P. On C(J)-spaces. Preliminary report, A-189.
NARCOWICH, Francis J. Some results in R-matrix theory. Preliminary report, A-251.
---. See ALLEN, Graham D.
NASHED, M. Z. See VOTRUBA, George F.
NASHED, M. Zuhair and MOORE, Robert H. Approximations to generalized inverses of linear operators, A-310.
NASHED, M. Zuhair and VOTRUBA, George F. Transformations of generalized inverses under changes of projectors, A-337.
NASIM, Cyril. See GOEL, Devendra S.
NATARAJAN, Ponnammal and MAXSON, Carlton J. On the endomorphism monoids of complete Boolean algebras, A-633.
NATHANSON, Melvyn B. Uniform distribution and linear recurrences. Preliminary report, A-53; Asymptotic independence of sequences of integers, A-453.
NAYAK, M. K. See SRINIVASAN, T. P.
NEFF, M. F. See CRUSE, Allan B.
---. See EVANS, Trevor.
NEGGERS, Joseph. An algebra whose elements are weighted polychromatic graphs. Preliminary report, A-40.
NELSON, Evelyn. Semilattices do not have equationally compact hulls, A-600.
NERODE, Anil and METAKIDES, George. Creative presentations. Preliminary report, A-551.
NEWBERRY, R. Steve. Diagonal paradoxes. I. Preliminary report, A-502; A retraction of previously announced results, A-596.
NEWHOUSE, Sheldon E. Symplectic diffeomorphisms. Preliminary report, A-232.
NEWMAN, James M. A note on coercive inequalities for irregular regions. Preliminary report, A-394.
NEWMAN, Michael F. See ALFORD, William A.
NEWMAN, Morris and SHEINGORN, Mark E. Continuous solution of a homogeneous functional equation, A-153.
NEWMAN, Stagg. One-point compactifications of Q-manifold factors and infinite mapping cylinders. II. Preliminary report, A-508.
NICHOLAS, Peter. Subgroups of the free topological group on [0,1], A-503.
NICHOLSON, W. Keith. Semiregular rings and modules. Preliminary report, A-473; Semiperfect rings with abelian adjoint group, A-519.
NICO, William R. Monoids acting on sets, A-100.
NICKEL, James A. See HALE, Douglas F.
NIEDERREITER, Harald G. Pseudo-random sequences generated by number-theoretic methods and their applications to numerical integration, A-51.
NIEDERREITER, Harald and LO, Siu Kwong. Uniform distribution of sequences of algebraic integers, A-603.
NIELSON, Gregory Morris and WEISS, N. A. Powers of Markov operators. Preliminary report, A-246.
NIJENHUIS, Albert. Smith canonical forms of integer matrices. Preliminary report, A-389.

NOHEL, John A. See MILLER, Richard K.
NORDAHL, Thomas. See HAMILTON, Howard B.
NORRIS, Eugene M. Relative act ideals, A-444.
---. See BEDNAREK, A. R.
NORRIS, Eugene M. and BEDNAREK, A. R. Semigroups of continuous relations on compact totally disconnected spaces. Preliminary report, A-220.
NORTON, Karl K. Estimates for prime kth power nonresidues, A-3; Applications of the Siegel-Walfisz prime number theorem. I, A-50; Applications of the Siegel-Walfisz prime number theorem. II, A-297; The absolute value of a Gaussian sum. Preliminary report, A-370; On the number of restricted prime factors of an integer. I, A-436; On the number of restricted prime factors of an integer. II, A-484.
NOVAK, William D. A class of distributions on a locally compact Abelian group. Preliminary report, A-170.
NOVINGER, William P. Real parts of uniform algebras on the circle. Preliminary report, A-185.
NUMMELA, Eric C. Projective abelian topological groups need not be free, A-107.
NUNKE, Ronald J. Uniquely elongating modules, A-98.
NUSSBAUM, A. Edward. Representation of functions in terms of spherical functions in symmetric spaces of noncompact type of rank 1, A-168.
NUSSBAUM, Roger D. The structure of the set of periodic solutions of some functional differential equations. Preliminary report, A-300.
NYIKOS, Peter J. Proto-metrizable spaces. Preliminary report, A-328; On the product of suborderable spaces, A-464; Basically screenable and countable-dimensional spaces. Preliminary report, A-450; Not every scattered space has a scattered compactification. Preliminary report, A-570.
O'BRIEN, Richard Christopher. See JAMISON, Robert E. II.
O'CONNELL, James R., Jr. See BEARD, Jacob T. B., Jr.
ODLYZKO, Andrew M. See MALLOWS, Colin L.
O'FARRELL, Anthony G. A generalised Walsh-Lebesgue theorem. Preliminary report, A-377.
OGIUE, Koichi. See CHEN, Bang-Yen.
OKEE, Jekeri. Representation theorem for S-lattices. Preliminary report, A-531.
OLESKY, D. D. See BRENNER, J. L.
OLIN, Philip. Free products and elementary equivalence. II. Preliminary report, A-380; Elementary types of free products of Boolean algebras. Preliminary report, A-554.
---. See JONSSON, Bjarni.
OLIN, Robert F. Functional relationships between a subnormal and its normal extension. Preliminary report, A-492.
OLIVER, Horace and HEATHERLY, Henry E. Near integral domains. II. Preliminary report, A-3.
O'MALLEY, Matthew J. Groups of R-automorphisms of R[X]. Preliminary report, A-62.
O'MALLEY, R. E., Jr. Phase plane solutions to some singular perturbation problems, A-623.
O'MALLEY, Thomas John. The geometry of S-subgroups of the hyperbolic groups. Preliminary report, A-383.
O'MEARA, O. Timothy. Hilbert's Eleventh Problem: Quadratic forms with any algebraic numerical coefficients, A-456.
O'NEIL, Peter V. Reconstruction of a class of blocks. Preliminary report, A-39.
O'NEILL, Duane. Annihilators in a homological dimension of $MU_*(B(\mathbb{Z}/p))$, A-224.
ORDMAN, Edward T. Free products in the category of k-groups, A-109.
ORR, William F. The flock conjecture in finite egglike inversive planes, A-201.
---. See CARROLL, Carleton W.
OSBORN, John E. and SATHER, Duane P. Alternative problems for nonlinear equations. Preliminary report, A-192.
OSGOOD, Charles F. On the effective "diophantine approximation" of algebraic functions and applications to nonlinear differential equations, A-56.
OSHER, Stanley. Hyperbolic equations with pseudo-differential boundary conditions, A-148.
OSLER, Thomas J. An identity for simplifying certain generalized hypergeometric functions, A-128; Leibniz rule for fractional derivatives used to generalize formulas of Walker and Cauchy, A-396.
OSTERBURG, James. Completely outer groups of automorphisms acting on R/J(R), A-436.
O'SULLIVAN, John. Manifolds without focal points. Preliminary report, A-446.
OTTMANN, Thomas. A 7-symbol 2-state universal Turing machine with a twodimensional tape, A-594.
OUTCALT, David L. See CELIK, Hasan A.
OUTCALT, David L. and YAQUB, Adil M. On the structure of associative rings with a special ideal, A-76.
OWENS, Frank W. Sums of consecutive U-numbers. Preliminary report, A-298; Matrices and symmetric matrices with zero diagonal. Preliminary report, A-457.
OXTOBY, John C. The kernel operation on subsets of a T_1-space, A-215.
PADMANABHAN, R. A minimal self-dual equational basis for Boolean algebras, A-368.
---. See GRÄTZER, George A.
---. See LAKSER, H.
---. See MENDELSOHN, N. S.
PAGE, Stanley S. π-regular quotient rings of Noetherian rings. Preliminary report, A-76.
PAK, Jingyal. On a fibre map. Preliminary report, A-225.
PALKA, Bruce P. See BLEVINS, Donald K.
PALL, G. See CHEEMA, M. S.
PANDA, Rekha. A note on some generating functions for the Jacobi polynomials, A-301; Some polynomials of several variables. Preliminary report, A-442.
---. See SRIVASTAVA, H. M.
PANDEY, J. N. and PATHAK, R. S. A distributional Hardy transformation, A-188.
PAO, Chai Ven. Positive solutions of a weakly coupled nonlinear parabolic system, A-146.
PAPADAKIS, John S. and WOOD, David H. An addition formula for Riemann functions, A-151.
PAPADOPOULOS, Alex S. Scale and reliability bounds for Gamma under a Bayesian influence, A-403.
PAPANICOLAOU, George C. Asymptotic methods for stochastic equations, A-404.
PAPASTAVRIDIS, Stavros G. Polynomial algebras which are modules over the mod-p Steenrod algebra. Preliminary report, A-405.
PAPICK, Ira J. See DOBBS, David E.
PAPP, Frank J. The functional equation $f(xy) = ff(x)xyff(y)$ in a partially ordered monoid. Preliminary report, A-490.
PAPP, Zoltan. On the strong injective [projective] dimension of modules. Preliminary report, A-67.
PARAMESWARAN, M. R. On the limit points of certain sets in summability theory, A-11; Tauberian theorems for product methods. I, A-156; On a theorem of Rhoades on the summability domains of Hausdorff methods, A-299; A Tauberian theorem for logarithmic means, A-376; Some Tauberian theorems for the S_B-method of summability, A-443.
PARANJAPE, S. R. See PARK, Chull.
PARK, Chull and PARANJAPE, S. R. Distribution of the supremum of the Yeh-Wiener process on the boundary, A-236.
PARKER, David Lionel. Stable cohomotopy groups are compact shape invariants, A-223.
PARKER, Elwood G. Triples of collections of subsets of topological spaces, A-214.
PARKER, Tom and GILMER, Robert. Nilpotent elements of commutative semigroup rings. Preliminary report, A-604.
PARNES, M. N. and CHUI, Charles K. Conditional probability on sets related to some diophantine inequalities and overconvergence, A-53.
PARSHALL, Brian J. See CLINE, Edward T.
PARSONS, Torrence D. Ramsey graphs and block designs. Preliminary report, A-473.
PARTER, Seymour V. Differential equations with "turning points" and numerical methods, A-641.
PASCHKE, William L. Orthogonality of states on C*-algebras. Preliminary report, A-176.
PASTERNACK, Joel S. See LAZAROV, Connor.
PATEL, B. G. See GANDHI, J. M.
PATHAK, P. K. See KOOPMANS, Lambert H.
PATHAK, R. S. See PANDEY, J. N.

PAULOS, J.A. Truth-maximality and Δ-closed logics. Preliminary report, A-448; A note on Δ-closures of logics. Preliminary report, A-501.
PAUR, Sandra Orley. Stokes' theorem for integral currents and integral currents modulo ν. Preliminary report, A-208.
PAYNE, Stanley E. A maximum determinant problem, A-65.
PAZIRANDEH, Mohsen. Radial components of differential operators on a vector space, A-106.
PEARCY, Carl M. and SALINAS, Norberto. Finite dimensional representations of separable C*-algebras, A-376.
PECELLI, Giam. See CHURCHILL, Richard C.
PEDERSEN, Franklin D. Spitz in 1-groups. Preliminary report, A-43.
PEEBLES, Herbert E. On convergence of sequences of measurable functions. Preliminary report, A-373.
PELLETIER, Joan Wick. See HERZ, Carl.
PENDERGRASS, J. William. The Schur subgroup of the Brauer group. Preliminary report, A-520.
PENNEY, David E. and HUFF, Gerald B. Schedules for testing individuals in tournaments for pairs. A-476.
PERKO, Kenneth A., Jr. On dihedral linking numbers of knots, A-327; On 10-crossing knots, A-405; Octahedral knot covers, A-569.
PERLA-MENZALA, Gustavo. A uniqueness theorem for the 3-dimensional inverse scattering problem of the wave equation. Preliminary report, A-308.
PERRY, Robert J. Relational models as generators of triples through reflective and coreflective functors. Preliminary report, A-434.
PERRY, William L. and LUNING, Charles D. Solution of an integral equation arising in the determination of molecular weight distributions. Preliminary report, A-174.
PETERS, George O. Attitude determination. Preliminary report, A-245.
PETERS, James Vincent. Spanning L^p classes of semigroups. Preliminary report, A-303.
PETERSON, Allan C. A local existence theorem, A-133.
PETERSON, H. Leroy. Pseudocompactness of large totally bounded groups. Preliminary report, A-113.
PETRICH, Mario. Completely semisimple semigroups with zero whose idempotents form a tree, A-89.
PETRIDIS, Nicholas C. See GOLDBERG, Samuel I.
PETTET, Martin R. Finite groups admitting fixed-point-free action by a product of elementary Abelian groups. Preliminary report, A-2.
PETTEY, Dix H. A minimal regular space need not be strongly minimal regular. Preliminary report, A-17.
PETTY, Joe V. A weak homomorphic image closure property of Z-groups, SI-groups, A-531.
PFISTER, Albrecht. Hilbert's seventeenth problem and related problems, A-509.
PFLUGFELDER, Hala O. Selfadjoint subgroups of Bol loops. Preliminary report, A-103.
PHILIPP, Walter. Limit theorems for lacunary series and uniform distribution mod 1, A-55.
PHILIPP, Walter and STOUT, William F. Almost sure invariance principles for sums of weakly dependent random variables, A-557.
PHILLIPS, John Gilbert. Genera and modular decomposition numbers. Preliminary report, A-484.
PHILLIPS, Thomas M. Completable Aronszajn spaces, A-622.
PICCININI, Renzo A. Homology theories and Kan extensions, A-507.
PICHORIDES, Stylianus K. A lower bound for the L^1-Norm of exponential sums. Preliminary report, A-307.
PIELE, Donald T. An approximation of harmonic functions in E^3 by potentials of unit charges, A-125.
PIERCE, Richard S. Projective dimensions of idempotent generated left ideals, A-75.
de PILLIS, John. Decomposable tensors as sums of dyads, A-409.
PINCUS, David F. Adding dependent choice, A-19.
PINSKY, Mark A. Asymptotic stability of stochastic differential equations, A-403.
---. See ELLIS, Richard S.
PINTER, Charles C. On the amalgamation property, A-501.
PIPPERT, Raymond E. See BEINEKE, Lowell W.
PIRTLE, Elbert. Generalized factorial rings, A-61.
PITT, Joel H. Recurrence criteria for random walks on countable abelian groups. II. Preliminary report, A-569.
PLANTE, J.F. Minimal sets of foliations, A-232.
PLATT, C.R. See LAKSER, H.
PLEMMONS, R.J. Regular splittings and the discrete Neumann problem, A-632.
PLESS, Vera S. and SLOANE, Neil J.A. On the classification and enumeration of self-dual codes. Preliminary report, A-89.
PLOTKIN, J.M. ZF and Boolean algebras. Preliminary report, A-551.
PLUMMER, Michael D. See LOVÁSZ, L.
POGUNTKE, Werner. On the decomposition of S-spaces Preliminary report, A-369.
---. See DAVEY, Brian A.
POLIMENI, Albert D. Groups in which Aut(G) is transitive on the isomorphism classes of G, A-103.
---. See CHARTRAND, Gary.
POMERANCE, Carl. On the congruences $\sigma(n) \equiv a \pmod{n}$ and $n \equiv a \pmod{\varphi(n)}$, A-51; On a problem of Erdös concerning the functions σ and φ, A-369; The second largest prime factor of an odd perfect number, A-603.
---. See HUNSUCKER, John L.
POREDA, Stanley J. A negative result on the continuity of best approximations, A-488; A counterexample for approximation on a real interval, A-532.
PORTER, A. Duane. Partitions of a matrix. Preliminary report, A-65.
PORTER, Jack R. Lattices of H-closed extensions, A-212.
---. See DICKMAN, Raymond F., Jr.
PORTER, James F. See FELDMAN, William A.
PORTER, James F. and FELDMAN, William A. Order units and bases generalized for locally convex spaces. Preliminary report, A-180.
POTLURI, Rao. Finite nonsolvable groups having exactly one irreducible complex character of a given degree. Preliminary report, A-94.
POWELL, Robert E. See FRICKE, Gerd H.
POWELL, Robert E. and SHOOP, Richard A. The Gibbs phenomenon for generalized Taylor and Euler transforms, A-154.
POWELL, William C. How much classical model theory depends on the law of excluded middle? Preliminary report, A-403.
PRABHAKAR, N.D. Discounted dynamic programming over continuous time. Preliminary report, A-254.
PRAJAPAT, M. L. See JOSHI, Chandra Mohan.
PRAKASH, C.V.S. See JAIN, Padam C.
PRAT, Uri. On the weak sum theorem in dimension theory, A-507.
PRESKENIS, Kenneth J. Another view of the Stone-Weierstrass theorem. Preliminary report, A-593.
PRICE, Douglas B. On the convergence of some sequence of distributions. Preliminary report, A-179.
PROCESI, Claudio. Semisimple representations of rings. Preliminary report, A-77.
PRZYMUSIŃSKI, Teodor. A note on collectionwise normality and product spaces, A-506; Normality and paracompactness in subsets of product spaces, A-559.
---. See ALSTER, K.
PTÁK, Vlastimil. See FIEDLER, Miroslav.
PU, H.H., CHEN, J.D. and PU, H.W. A theorem on approximate derivates. Preliminary report, A-375.
PU, H.W. See PU, H. H.
PURDOM, Seaton D. Generator theory for an embedding of a nonlinear semigroup. Preliminary report, A-184.
PURISCH, Steven. Splitting points in the Cantor set, A-211.
PURSELL, Lyle E. Isomorphisms between rings of real functions which identify fixed, maximal ideals, A-541.
PUTCHA, Mohan S. The S-indecomposable component of an arbitrary semigroup. Preliminary report, A-93.
PUTCHA, Mohan S. and YAQUB, Adil. Multiplicative commutators in division rings, A-71.
PUTNIK, Leonard J. See MATKOWSKY, Bernard J.
PUTTASWAMY, T.K. Stokes' multipliers for a certain third order differential equation of W.B. Ford's type, A-132.

PUTTASWAMY, T.K. and SEEKRI, Raj Paul. Solution in the large of a certain differential equation with an irregular singular point of rank greater than one, A-398.
PUTZ, Robert and KAPLAN, Aroldo. Harmonic forms on symmetric spaces, A-108.
QUACKENBUSH, Robert W. Linear spaces with prime power block size. Preliminary report, A-522; Varieties of Steiner quasigroups and Steiner loops. Preliminary report, A-600.
---. See FROEMKE, Jon.
QUALLS, Clifford R. See KOOPMANS, Lambert H.
QUINN, D.W. and WEINACHT, Richard J. A mean value theorem in generalized bi-axially symmetric potential theory, A-147.
RABINOVITCH, Issie. The dimension of semiorders. Preliminary report, A-41.
---. See BOGART, Kenneth P.
RACE, Edward A. Bounds for a lognormal probability distribution parameter, A-15.
RADIN, Charles. Regularity of the sample paths of noncommutative processes, A-238.
RADJABALIPOUR, Mehdi and RADJAVI, Heydar. On a question of Colojoara and Foias. Preliminary report, A-373.
RADJAVI, Heydar. See RADJABALIPOUR, Mehdi.
RADLOWSKI, M. See KRONK, Hudson V.E.
RAINS, Michael A. On a majorant principle for functions with positive coefficients. Preliminary report, A-302.
RAJAGOPALAN, M. A chain compact space which is not strongly scattered, A-569.
---. See JAYACHANDRAN, M.
RAJAGOPALAN, M. and ROY, A.K. Polytopes in locally convex spaces, A-395.
RAMAMURTHI, V.S. Exact radicals, A-522.
RAMBALLY, Rodney S. On boundedness and stability of perturbed systems of ordinary differential equations, A-131.
RAMIREZ, Donald E. See DUNKL, Charles F.
RAMRAS, Mark B. Right exterior R-sequences and symmetric matrices. Preliminary report, A-68.
RANDTKE, Daniel J. See CHAPMAN, William H.
RANGE, R. Michael and SIU, Yum-Tong. C^k approximation by $\bar{\partial}$-closed forms on C^k submanifolds of a complex manifold, A-126.
RANKIN, Samuel M. III. Oscillation theorems for second order nonhomogeneous linear differential equations. Preliminary report, A-340; Oscillation criteria for elliptic differential equations. Preliminary report, A-611.
RAO, A. Satyanarayan and HENGARTNER, W. On the existence of a unique almost periodic solution of an abstract differential equation. Preliminary report, A-133.
RAO, C.J.M. On Richardson's compactification for convergence space, A-504; On largest Hausdorff compactification for convergence spaces. Preliminary report, A-565; On a problem of Fletcher, Hoyle and Patty. Preliminary report, A-596.
RAO, K. Nageswara. A relation between certain classes of a particular Abelian group and a cyclic group. Preliminary report, A-36.
RAO, Shrikant N. Estimates for mean values for the Dedekind zeta-function on the critical line, A-525.
RAO, V.R. Gopala. Sobolev-Galpern equations of order $2n+1$ in $R^m \times R$, $m \geq 2$. Preliminary report, A-148.
RAO, Veldanda V. Lattice points of rational indefinite quadratic forms, A-54.
RAPHAEL, R. Injective objects in ring categories. Preliminary report, A-82.
RASMUSSEN, John R. -p as the sum of two squares in an algebraic number field. Preliminary report, A-57.
RAUCH, Jeffrey. Decaying solutions of wave equations must be smooth. Preliminary report, A-149.
RAY, Barada Kinkar. On a fixed point theorem. Preliminary report, A-327; On common fixed points. Preliminary report, A-598.
RAY, S.K. See KAMTHAN, P.K.
RAYBURN, M. Hausdorff proximities, A-558.
RAY-CHAUDHURI, Dijen K. Some recent developments in combinatorics, A-40.
RAY-CHAUDHURI, Dwijendra K. See SPRAGUE, Alan P.
RAYNA, Gerhard. See GORDON, Henry G.
READE, Maxwell O. Generalizations of Bazilevič functions. I. Preliminary report, A-438; Generalizations of alpha convex functions. I. Preliminary report, A-486.
---. See MILLER, Sanford S.
READE, Maxwell O., MOCANU, Petru T and ZŁOTKIEWICZ, Eliguisz. On the functional $[f(a)/f'(b)]$ in S_R. Preliminary report, A-124.
REAY, John R. and BEAN, Phillip W. Radon-type theorems in partial order convexity spaces, A-204.
REBHUHN, Deborah. On the set of attainability of nonautonomous nonlinear control systems. Preliminary report, A-305.
REDDIEN, G.W. Patch bases and singular splines. Preliminary report, A-615.
REDDIEN, G.W. and TRAVIS, Curtis C. Galerkin's method and differential equations with functional arguments, A-247.
REDDY, A.R. Rational Chebyshev approximation to e^{-x} on the positive real axis. Preliminary report, A-9; A note on rational approximation on $[0,\infty)$. Preliminary report, A-302.
---. See ERDÖS, Paul.
REDFIELD, Robert H. Uniform subcompletions of Dedekind completions, A-44.
REED, Coke S. Embedding theorems for dynamical systems, A-345.
REED, George M. Concerning first countable spaces. III. A-219; On Q-sets in normal first countable T_2-spaces, A-619; On separating open covers in Moore spaces, A-642.
REED, George Michael and ZENOR, Phillip L. A metrization theorem for normal Moore spaces, A-385.
REID, James D. Irreducible abelian groups. Preliminary report, A-101.
REID, Kenneth B. See ALSPACH, Brian R.
REINEKE, Joachim. Reduced products of commutative rings. Preliminary report, A-447.
REITER, Harold B. A hyperspace of convex sets. Preliminary report, A-216.
REMMEL, Jeffrey B. Combinatorial functors on co-r.e. structures. Preliminary report, A-501; Co-hypersimple algebraic structures, A-556; Co-r.e. cohesive vector spaces, A-595.
RENEKE, James A. The input-output functions for a class of hereditary systems. Preliminary report, A-339; Stability and control of hereditary systems. Preliminary report, A-613.
RESCH, Richard I. Free S^3-actions on nine-manifolds, A-231.
RESNIKOFF, H.L. Differential geometry and color perception, A-385.
RETHERFORD, James. Applications of Banach ideals of operators, A-610.
---. See MORRELL, Joseph S.
REYNOLDS, Albert C., Jr. A note on Carasso's method. Preliminary report, A-243.
REYNOLDS, Donald F. A preservation theorem for simple expansions of topologies. Preliminary report, A-214.
REYNOLDS, George D. A sharpened contravariant representation theorem, A-82.
RHODES, John. Old and new ways to construct finite semigroups, A-102.
RIBES, Luis. Cohomological characterization of amalgamated products of groups, A-92.
RICE, Bart Francis. Representations of integers by certain quaternary quadratic forms. Preliminary report, A-48.
RICE, Michael D. Uniformities in the descriptive theory of sets. Preliminary report, A-316; h-closed σ-algebras. Preliminary report, A-372; Uniformities in the descriptive theory of sets. II, A-439.
RICH, Michael. Rings with idempotents in their nuclei, A-365.
RICHMAN, Fred. Constructive techniques in abelian group theory, A-99.
RICHTER, Michael. Resolution, Gentzen-systems and Maslov's method. Preliminary report, A-24.
RIDDELL, James. See BRENNER, J.L.
RIDENHOUR, Jerry R. See KEENER, Marvin S.
RIECKE, Caroll V. Modification of convergence structures by self-maps, A-219.
RIEGER, Georg J. On a theorem of S. Uchiyama concern-

ing the largest squarefree divisor, A-5; On two arithmetical sums, A-482; On two theorem of Erdös about the representation by Liouville-numbers, A-521; On a theorem of Churchhouse concerning sums of fractional powers, A-590.
RIGAS, Alcibiades. Riemannian metrics of nonnegative curvature on stable vector bundles over spheres. Preliminary report, A-379.
RINGEISEN, Richard D. The crossing number of $C_m \times K_3$. Preliminary report, A-35.
RINGEL, Claus Micha. See DLAB, Vlastimil J.
RINGEL, Gerhard. Cyclic arrangements of the elements of a group, A-95.
RISMAN, Lawrence James. Stability: Index and order in the Brauer group, A-432.
RIVAL, Ivan. See DAVEY, Brian A.
---. See KELLY, David.
RIVIERE, Nestor M. See FABES, Eugene B.
RIZVI, M. Haseeb and SAXENA, K. M. Lal. On interval estimation and simultaneous selection of ordered parameters, A-239.
ROACH, F. A. Continued fraction representation of points of an inner product space, A-343.
ROBBIE, Desmond A. Product structure in topological algebras, A-109.
ROBBINS, David A. Continuous function representations of some Banach modules, A-165.
ROBERTS, James W. A functional characterization of compact convex sets. Preliminary report, A-184.
ROBERTS, J. H. Embeddings transversal to algebraic sets, A-346.
ROBINSON, William B. See CRONE, Lawrence J.
ROCHBERG, Richard. Continuation of Riemann surfaces, A-123.
ROD, David L. See CHURCHILL, Richard C.
RODABAUGH, David J. and STOCKTON, Ray E. On simple totally antiflexible algebras, A-78.
RODRIGUE, Garry. See McCORMICK, S. F.
ROEDER, David W. Category theory applied to Pontryagin duality, A-112.
ROGERS, C. W. See BERGER, Alan E.
ROGERS, James T., Jr. A cohomological characterization of pre-images of nonplanar, circle-like continua, A-209.
ROGERS, Leland E. Arcwise connectedness and continuum chainability, A-213.
ROMAN, Steven M. A problem of Zarankiewicz, A-485.
ROQUES, Alban. Local evolution systems in general Banach spaces. Preliminary report, A-640.
RORRES, Chris, and FAIR, Wyman G. Optimal equilibrium harvesting policy of an age-specific population. Preliminary report, A-402.
ROSA, Alexander. A theorem on the maximum number of disjoint Steiner triple systems, A-479.
---. See LINDNER, Charles C.
ROSA, Domenico. Necessary and sufficient conditions for C(X) to be a B(L) algebra. Preliminary report, A-300.
ROSASCO, John S. A note on Jones' function K, A-629.
ROSELLE, David. A combinatorial problem involving q-Catalan numbers, A-609.
---. See ALSPACH, Brian R.
ROSEN, Harvey. Connectivity points and Darboux points of real functions. Preliminary report, A-218; Wild universally pierced arcs. Preliminary report, A-451.
ROSENBERG, Alan E. On the simplicial radical of the group algebra. Preliminary report, A-432.
ROSENBERG, Ivo G. The set of maximal closed classes of operations on an infinite set A has cardinality $2^{2^{|A|}}$. Preliminary report, A-295.
ROSENBERG, Milton. Spectral integrals from the theory of multivariate stationary Payen processes. Preliminary report, A-395.
ROSENBLATT, Murray. Asymptotic distribution of multiple and related schemes. Preliminary report, A-54.
ROSENCRANS, Steven I. and BEALE, J. T. Wave equation with acoustic boundary conditions. Preliminary report, A-396.
ROSENHOLTZ, Ira N. Local expansions, derivatives, and fixed points, A-210; Evidence of a conspiracy among fixed point theorems. Preliminary report, A-561.
ROSENSTEIN, Joseph G. See HAY, Louise.
ROSENTHAL, John W. $\aleph_1$-categorical theories closed under intersections, A-22.
ROSENTHAL, Paul. On an inversion theorem for the general Mehler-Fock transform pair, A-171.
ROSINGER, Elemer E. Multiplication of Dirac distributions, A-541.
ROSS, James E. See HAGER, Richard A.
ROSSI, Hugo. On representations in complex cohomology of certain step 2 nilpotent groups, A-170.
ROTA, Gian-Carlo. Significance arithmetic, A-402.
ROTHSCHILD, Linda Preiss. Invariant tempered distributions on the Heisenberg group, A-109; Representations of semisimple groups associated to nilpotent orbits, A-110.
ROULIER, John A. The degree of copositive approximation, A-610.
ROUSSEAU, Cecil C. Probabilistic studies of certain path properties. Preliminary report, A-42; Generalized Ramsey theory for multiple colors, A-605.
ROVNYAK, James L. See FRANKFURT, Richard E.
ROWEN, Louis Halle. Prime ideals of Noetherian PI-rings, A-388; Generalized polynomial identities. II, A-455.
ROY, A. K. See RAJAGOPALAN, M.
ROY, Nina M. A characterization of square Banach spaces, A-392.
RUBEL, Lee A. and McVOY, W. S. H^∞ is coherent. Preliminary report, A-491.
RUBEL, Lee A. and YANG, Chung-Chun. Unavoidable families of meromorphic functions, A-301; On zero-one sets of entire functions, A-370.
RUBENFELD, Lester A. and WILLNER, Barry. Non-axisymmetric potential of a spherical cap. Preliminary report, A-144.
RUBIN, Arthur L. and RUBIN, Jean E. The cardinality of the set of Dedekind finite cardinals in Fraenkel-Mostowski models, A-22.
RUBIN, Jean E. See RUBIN, Arthur L.
RUBIN, Matatyahu. Interpretation of second order logic in the automorphism group of atomic boolean algebras. Preliminary report, A-501.
RUBINOW, Sol. I. Some mathematical problems in biology, A-402.
RUBINSTEIN, Sol. Diophantine homology with applications to the Mordell conjecture. Preliminary report, A-6.
RUCKER, Rudolf v B. Martin's axiom, scales, and the rich continuum, A-448.
RUCKLE, William H. Hadamard multipliers of infinite matrices, A-338.
RUDIN, Mary Ellen and STARBIRD, Michael P. The normality of products with a metric factor, A-210.
RUDIN, Walter. Sums of ideals, A-189.
RUOFF, Dieter and SHILLETO, James R. Quadratic n-gons, A-202.
RUPP, Russell D. The epsilon method, the method of multipliers, and a nonlinear optimal control problem. Preliminary report, A-393.
RUSH, David E. See COX, S. H., Jr.
RUSHING, T. Benny. See HOLLINGSWORTH, John G.
RUSKAI, M. Beth and LIEB, Elliott H. Schwartz inequality for operator maps and matrices, A-188.
RUTTER, Edgar A. 4-fold torsion theories, A-72.
RYSER, Herbert J. Indeterminates and incidence matrices, A-409.
SAARI, Donald G. Restrictions on the motion of particles in the three body problem, A-248.
SACERDOTE, George. Coforcing in model theory, A-24.
SACKER, Robert J. and SELL, George R. Existence of dichotomies and invariant splittings for linear differential systems. I. Preliminary report, A-139.
SACKS, Gerald E. See ABRAMSON, Fred G.
SADOSKY, Cora S. See COTLAR, Mischa.
SAEKS, Richard and STRAUSS, Monty J. Cauchy problems with triangular generators and the generalized Volterra equation. Preliminary report, A-145.
SAFF, Edward B. and VARGA, Richard S. Convergence of Padé approximants to e^{-z} on unbounded sets. Preliminary report, A-160; Rational approximation in unbounded regions, A-614.
SAHNEY, Badri N. See GOEL, Devendra S.

---. See WATERMAN, Daniel.
SALAZAR, Tom E. See DeMARR, Ralph.
SALINAS, Norberto. Subnormal limits of nilpotent operators, A-307.
---. See PEARCY, Carl M.
SALLOUM, R. M. See NAOUM, Adil G.
SALLY, Paul J., Jr. Multiplicity of representations in $L^2(G/\Gamma)$, A-114.
SALZER, Herbert E. Converting interpolation series into Chebyshev series by recurrence formulas, A-401.
SAMPSON, Gary, NAPARSTEK, Abraham, and DROBOT, Vladimir. (L_p, L_q) mapping properties of convolution transforms. Preliminary report, A-392.
SANCHEZ, David A. Iteration methods for nonlinear boundary value problems. Preliminary report, A-177.
SANDEFUR, James T., Jr. Higher order abstract Cauchy problems. Preliminary report, A-339.
SANDOMIERSKI, Francis L. Factorization of classes of modules. Preliminary report, A-73.
SANERIB, Richard A., Jr. Boolean algebras with ordered bases and the basis property for ultrafilters, A-608.
SANKAPPANAVAR, H. P. See BURRIS, Stanley N.
SANKOFF, David. See CHVATAL, V.
SAPERSTONE, Stephen. An example of a semiflow from the theory of Markov processes, A-138.
SARACINO, Dan. A counterexample in the theory of model companions. Preliminary report, A-316; On existentially complete nilpotent groups. Preliminary report, A-379.
---. See MACINTYRE, Angus.
SARAFYAN, Diran. Eighth order Runge-Kutta formulae, A-245.
SARASON, Leonard. Hyperbolic mixed problems in a quarter space. Preliminary report, A-490; L^2 estimates for hyperbolic and other first order systems in regions with corners, A-538.
SARIO, Leo. See MIRSKY, Norman D.
SATHER, Duane P. See OSBORN, John E.
SATTINGER, David H. See McLEOD, J. B.
SATYANARAYANA, Upadhyayula V. Some Fatou-type theorems for $H^{(p)}$. Preliminary report, A-123.
SAVITS, Thomas H. Limiting behavior of an age-dependent model. Preliminary report, A-381; Supercritical age-dependent birth and death process. Preliminary report, A-449.
SAWOROTNOW, Parfeny P. H^*-algebra valued measure on a locally compact space, A-625.
SAXENA, K. M. Lal. See RIZVI, M. Haseeb.
SAXON, Stephen A. Two characterizations of linear Baire spaces, A-189; Separable quotients of Banach spaces, A-615.
SCHAAR, Richard J. The singularly perturbed initial-value problem when the reduced path encounters a point of bifurcation. Preliminary report, A-139.
SCHAEFER, Philip W. On existence in the Cauchy problem for the biharmonic equation, A-147.
SCHARLEMANN, Martin G. See EDWARDS, Robert D.
SCHAY, Geza. Backward-forward duality for certain random evolutions. Preliminary report, A-404.
SCHECHTER, Martin. Completeness of the wave operators. Preliminary report, A-305; Estimates for multiplication operators on L^p, A-491.
SCHEIBLICH, Herman E. The congruence problem for regular semigroups, A-90.
SCHELP, Richard H. See FAUDREE, Ralph J., Jr.
SCHIFFMAN, Stephan J. See ARKOWITZ, Martin.
SCHMERL, James H. On κ-like structures which embed stationary sets. Preliminary report, A-447; On $\aleph_0$-categoricity and the theory of trees, A-500.
SCHMIDT, Jurgen. See FAJTLOWICZ, Siemion.
SCHMIDT, Wolfgang M. New results on irregularities of distribution, A-54.
SCHNEIDER, Dennis M. Sufficient sets for some spaces of entire functions, A-372.
SCHNEIDER, Robert B. Unit preserving isometries are homomorphisms in certain L^p, A-179.
SCHNEIDER, Victor. Homogeneous spaces with vanishing Steenrod operations. Preliminary report, A-225.
SCHNEIDER, W. J. See BARTH, Karl F.
SCHOCHET, Claude L. See KAMINKER, Jerome.
SCHOONOVER, Larry. Quasi-continuous functions in topological spaces, A-117.
SCHORI, Richard M. Techniques and recent developments in hyperspace problems. Preliminary report, A-229.
SCHOTTENLOHER, Martin. On the holomorphic completion of locally convex spaces. Preliminary report, A-182.
SCHULTZ, Henry J. Systems of derivations on topological algebras of power series, A-177.
SCHULTZ, John H., Jr. Some properties of the coefficients of the characteristic polynomial of an endomorphism. Preliminary report, A-480.
SCHWARTZ, Alan L. See CONNETT, William C.
SCHWARTZ, Alan L. and CONNETT, William C. A multiplier theorem for Jacobi expansions, A-164; Weak type multipliers for Hankel transforms, A-165.
SCOTT, Frederick. Asymptotic properties of the solutions of second order nonlinear differential equations. Preliminary report, A-141.
SCOTT, Jerry. Monotonic permutations and pairing, A-334.
SCOTT, Leonard L., Jr. See CLINE, Edward T.
SCOVILLE, Richard. Some peoperties of the Catalan numbers, A-602.
SEEKRI, Raj Paul. See PUTTASWAMY, T. K.
SEELBACH, Marijean. Some common fixed point theorems for compact metric spaces. Preliminary report, A-179.
SEIDMAN, Stephen B. Strong cofibrations in function spaces, A-222.
SEIFERT, George and GRIMMER, Ronald. Asymptotic stability of functional differential equations with infinite delay. Preliminary report, A-140.
SELDIN, Jonathan P. A normal form theorem for generalized functionality. Preliminary report, A-23.
SELFRIDGE, John L. See BRILLHART, John.
SELL, George R. See SACKER, Robert J.
SELMAN, Alan L. A note on spectra, A-320; On the structure of NP. Preliminary report, A-498.
---. See LADNER, Richard E.
SELZLER, Michael. See BALLEW, David W.
SENGE, George, Enumeration of 3-trees. Preliminary report, A-33.
SERRIN, James B. Solvability of boundary value problems. (Hilbert's Twentieth Problem.), A-459.
SHAFFER, Dorothy B. Radii of starlikeness and convexity for special classes of analytic functions, A-122.
SHAH, Swarupchand M. Probability distributions and entire characteristic functions, A-123; Probability distributions and entire characteristic functions. II, A-441; Exceptional values of entire characteristic functions, A-542.
SHAMMA, Shawky E. Asymptotic eigenfunctions of exterior problem of Stekloff's type, A-173.
SHANKAR, Hari. See BOGDA, Richard A.
SHANKAR, Hari and BOGDA, Richard A. The maximum term of a power series. Preliminary report, A-10; On the growth of analytic functions. II. Preliminary report, A-120; On proximate order and zeros of a holomorphic function. Preliminary report, A-495; Convolutions of holomorphic functions. Preliminary report, A-535.
SHANKS, Merrill and WARNER, Seth. Locally bounded topologies on the rationals, A-58.
SHAPIRO, Harold S. Measure-invariant sets and the spectra of indicator functions, A-490.
SHAPIRO, Joel H. and SHIELDS, Allen L. Unusual topological properties of the Nevanlinna class, A-124.
SHAR, Albert O. Extensions of H-spaces. Preliminary report, A-225.
SHARMA, N. K. Banach algebra of conservative Hausdorff matrices. Preliminary report, A-532.
SHARMA, P. L. Properties which are preserved into k-spaces under coreflections, A-221.
SHATZ, Stephen S. Vector bundles on algebraic curves and surfaces, A-64.
SHAW, Howard C. Nonlinear elliptic boundary value problems at resonance, A-151.
SHAY, Margaret and YOUNG, Paul. Characterizing the orders changed by translations. Preliminary report, A-14.
SHAY, P. Brian. Hopf algebra decompositions of $H^*(BU)$. Preliminary report, A-224.

SHEEHAN, J. and WRIGHT, E. M. The number of Hamiltonian circuits in thickly edged graphs, A-530.
SHEINGORN, Mark E. See NEWMAN, Morris.
SHELAH, Saharon. Uniqueness of prime models, with an application to differential fields. Preliminary report, A-318; Various results in mathematical logic. Preliminary report, A-502; Compactness in singular cardinals, free groups and Whitehead problem. Preliminary report, A-556.
SHELDON, Philip B. See BOISEN, Monte B., Jr.
SHELTON, Robert O. Necessary condition for a non-collision singularity in the four body problem. Preliminary report, A-641.
SHER, Richard B. Absolute proper retracts, A-212.
SHERMAN, Gary J. Homomorphism theorems for partially cyclically ordered groups, A-43.
SHIELDS, Allen L. See BROWN, Leon.
---. See SHAPIRO, Joel H.
SHIFFMAN, Max. Nonmeasurability of sets and the continuum hypothesis, A-116; Kinds of measure spaces, A-556.
SHILLETO, James R. See RUOFF, Dieter.
SHILLETO, J. R. and WESTON, J. H. Strongly separable topological spaces. Preliminary report, A-220.
SHISHA, O. See BACOPOULOS, A.
SHIVE, Robert A., Jr. See BAKER, James D.
SHOENFIELD, J. R. The decision problem for recursively enumerable degrees, A-386.
SHONKWILER, Ronald. Spectral triples, A-196; Multi-parameter Stieltjes transformations, A-613.
SHOOP, Richard A. Some applications of (f, d_n) summability, A-154.
---. See POWELL, Robert E.
SHORE, Richard A. The α-degrees of nonregular and nonhyperregular α-r.e. sets. Preliminary report, A-20.
SHORE, R. A. and SOARE, R. I. A non-extendable automorphism of $\mathcal{P}^*$. Preliminary report, A-555.
SHORES, Thomas S. Continuous subfunctors of the identity. Preliminary report, A-368.
---. See LEWIS, William James.
SHRIKHANDE, Mohan S. See BRIDGES, W. G.
SHUCHAT, Alan H. Spectral measures and homomorphisms, A-187.
SHUTTERS, William. Exchange rings and P-exchange rings. Preliminary report, A-590.
SIBLEY, David A. Finite groups with an Abelian Sylow group, A-524; Coherence in finite groups with a Frobenius subgroup, A-589.
SIBUYA, Yasutaka. On the problem of uniform simplification in a full neighborhood of a transition point. Preliminary report, A-624.
SICHLER, J. See GRÄTZER, George A.
SIDDIQI, A. H. See ESFAHANIZADEH, J.
SILBERGER, Donald M. Basically universal words in a free semigroup. Preliminary report, A-26.
SILVERMAN, Herb. Linear combinations of convex mappings, A-120.
SILVIA, Evelyn Marie. See EENIGENBURG, Paul J.
SIM, Soon-Kiong. Right noetherian rings of which every prime kernel functor is symmetric. Preliminary report, A-435; Prime ideals and symmetric idempotent kernel functors. Preliminary report, A-475.
SIMPSON, James E. Legitimate decks of graphs, A-39.
SIMPSON, Stephen G. Second-order arithmetic and first-order degree theory. Preliminary report, A-553.
---. See JOCKUSCH, Carl G., Jr.
SINGH, Bhagat. See DAHIYA, R. S.
SINGH, Bhagat and DAHIYA, R. S. On oscillation of second order retarded equations, A-130.
SINGH, J. P. A characterisation of an entire function in terms of its mean values. Preliminary report, A-439; Integrability of trigonometric series with coefficients satisfying certain conditions, A-486; Best approximation by a saturation class of generalised Nörlund operators, A-543; Absolute summability factors of a Fourier series and series conjugate to it, A-592.
SINGH, Surjeet. Quasi-injective and quasi-projective modules over hereditary noetherian prime rings, A-71; Modules over hereditary noetherian prime rings, A-389; Modules over hereditary noetherian prime rings, II. Preliminary report, A-522.
---. See JAIN, S. K.
SINGH, Surjeet and ZAMEERUDDIN, Quazi. On commutative self-injective rings, A-289.
SINGLEY, Donald H. The geometry of pairs of metrics. Preliminary report, A-208.
SINHA, Rajendra Prasad. Hardy transformation on subspaces of L^{∞}. Preliminary report, A-488; On an infinite linear combination of partial sums of Fourier series, A-533.
SIU, Yum-Tong. See RANGE, R. Michael.
SKALA, Helen. An alternate way of avoiding the set-theoretical antimonies, A-28.
SKJELBRED, Tor. See CHANG, Theodore.
SKOUG, David L. See JOHNSON, Gerald W.
SLATER, Michael. Free alternative rings. Preliminary report, A-480.
SLOAN, Alan D. Analytic domination with quadratic form type estimates, A-196.
SLOANE, Neil J. A. See MALLOWS, Colin L.
---. See PLESS, Vera S.
SMITH, Donald R. A nonlinear boundary value problem on an unbounded interval, A-131.
SMITH, Douglas D. See CHAFFER, Robert A.
SMITH, Frank A. Extensions of partial orders on semigroups, A-454.
SMITH, Harry F. The Wedderburn principle theorem for generalized alternative algebras. I. Preliminary report, A-366.
SMITH, Harvey A. Commutative twisted group algebras, A-166.
SMITH, James Clarence, Jr. Some properties of weak θ-refinable spaces. Preliminary report, A-211.
SMITH, Martha Kathleen. Rings with an integral element whose centralizer satisfies a polynomial identity, A-433.
SMITH, Philip W. Nonlinear approximation theory. Preliminary report, A-639.
---. See ALLEN, Graham D.
---. See CHUI, Charles K.
SMITH, Stephen. Sylow automizers of order 2, A-85.
SMITH, T. L. See TSOKOS, Chris P.
SNIDER, Arthur David. Application of aliasing for stiff-oscillatory equations, A-244.
SNIDER, Robert L. Locally finite groups whose irreducible representations are finite dimensional over their commuting rings, A-90.
SNOW, Donald R. On obtaining lower bounds for optimal costs in calculus of variations. Preliminary report, A-199.
SNYDER, D. A. See ENTRINGER, Roger C.
SOARE, Robert I. Degrees and structure of speedable sets, A-380; Degrees and structure of levelable sets. Preliminary report, A-447.
---. See MORLEY, Michael D.
---. See SHORE, R. A.
SOBCZYK, Andrew. See COVER, Alan S.
SOBEL, Milton. See MOON, John W.
SOLOMON, Louis. Representations of finite Chevalley groups, A-104.
SOLOMON, Ronald. Finite groups with components of alternating type, A-103.
SOMASUNDARAM, D. See CHOUDHARY, B.
SOMERS, Kay B. See McLAUGHLIN, Harry W.
SONI, Kusum K. and SONI, Raj P. A Tauberian theorem related to the modified Hankel transform, A-171.
SONI, Raj P. See SONI, Kusum K.
SPECHT, William H. A factorization theorem for p-constrained groups, A-93.
SPEISER, Robert. Cohomological dimension in characteristic $p > 0$. Preliminary report. A-64.
SPENCE, Edward. Hadamard matrices of the Goethals-Seidel type, A-288; Hadamard matrices from relative difference sets, A-477.
SPENCER, Joel H. See BURR, Stefan A.
SPIKES, Paul Wenton. See GRAEF, John R.
SPRAGUE, Alan P. and RAY-CHAUDHURI, Dwijendra K. Characterization of projective 3-class association schemes, A-387.
SPRINGSTEEL, F. N. and SUDBOROUGH, I. Hal. The bounded semilinear languages are exactly those recognizable by one-way, nondeterministic multi-head finite automata. Preliminary report, A-247.

SPROWS, David J. Homeotopy groups of compact 2-manifolds. Preliminary report, A-406.
SRINIVASACHARYULU, K. Remarks on Banach algebras, A-8.
SRINIVASAN, Bhama. On the characters of the finite unitary groups. Preliminary report, A-96.
SRINIVASAN, T. P. and NAYAK, M. K. Scalar and vector valued premeasures, A-117.
SRIVASTAVA, H. M. and EXTON, Harold. A transformation formula relating two Lauricella functions. Preliminary report, A-6.
SRIVASTAVA, H. M. and LAVOIE, J. L. A certain method of obtaining bilateral generating functions, A-491.
SRIVASTAVA, H. M. and PANDA, Rekha. Some bilateral generating relations for a class of generalized hypergeometric polynomials. Preliminary report, A-9; Some expansions of hypergeometric functions in series of hypergeometric functions. Preliminary report, A-492; Expansion theorems for the H-function of several complex variables. Preliminary report, A-533; New generating functions involving several complex variables. Preliminary report, A-593.
SRIVASTAVA, H. M., GUPTA, K. C. and HANDA, S. A certain double integral transformation. Preliminary report, A-540.
SRIVASTAVA, J. B. and GUPTA, Vishnu. On semiprimary and restricted semiprimary group rings, A-483.
STALLMANN, Friedemann W. On local disconjugacy of ordinary nonlinear differential equations. Preliminary report, A-140.
ST. ANDRE, Richard J. See CHAFFER, Robert A.
STAPLES, Phillip O. See KELINGOS, John A.
STARBIRD, Michael P. The Borsuk homotopy extension theorem without the binormality condition, A-209.
---. See RUDIN, Mary Ellen.
STARK, W. Richard. A general method of analysis for strict-Π^1_1 reflection and its application to infinitary logic. Preliminary report, A-20.
STEEL, John. Forcing with tagged trees. Preliminary report, A-627.
STEEL, John and BURGESS, John P. On a theorem of Makkai. Preliminary report, A-320.
STEFAN, P. See CHILLINGWORTH, D. R. J.
STEIGER, William L. See KANTER, Marek.
STEIN, James D., Jr. Uniqueness of norm in certain L^p spaces, A-178.
STEIN, Junior. The Gram-Schmidt conjugate direction method and the method of parallel planes, A-244.
STEIN, Michael R. Surjective stability for K_1-like functors using Chevalley group methods. Preliminary report, A-81.
STEIN, Sherman K. Free sets and the capacity of a cyclic graph, A-527.
STEINBERG, Stanly Lee. Hyperbolic equations which are not necessarily strictly hyperbolic, A-18.
STEINBERG, Stuart A. See ARMENDARIZ, E. P.
STENGER, Frank and HARVEY, Charles M. A two dimensional extension of the method of bisections for solving nonlinear equations, A-242.
STENGLE, Gilbert and NARAYAN, Jack. A nonlinear scattering problem, A-624.
ŠTEPÁNEK, Petr and BALCAR, Bohuslav. Rigid Boolean algebras of power $\aleph_1$ can exist independently on the continuum hypothesis, A-500.
STEPHENS, A. B. See COHEN, Joel S.
STEPHENSON, John L. See TEWARSON, Reginald P.
STEPHENSON, Robert M., Jr. First countable separable spaces. Preliminary report, A-217.
STEPLEMAN, Robert S. See CHARTRES, Bruce A.
STEPP, James W. Semilattice on n-cells. Preliminary report, A-87.
STEVENS, Robert R. Uniqueness theorems for the generalized Schlömilch equation, A-173.
STEWART, M. James. See CHARTRAND, Gary.
STOCKTON, Ray E. See RODABAUGH, David J.
STOKES, Arnold P. Local coordinates around a limit cycle of a functional differential equation, A-133.
STOLARSKY, Kenneth B. Distances between points on a sphere. Preliminary report, A-314.
STOLL, Manfred. Harmonic majorants for plurisubharmonic functions on bounded symmetric domains with applications to the spaces H_ϕ and N_*, A-341.
STONE, Alexander P. and EISEMAN, Peter R. A note on a differential concomitant. Preliminary report, A-208.
STONE, Arthur L. The heights of adjoint towers. Preliminary report, A-81.
STONE, H. Edward. See GUTHRIE, Joe A.
STOUT, Lawrence Neff. The category of topological space objects in a topos $\underline{E}$ is $\underline{E}$-initial, $\underline{E}$-complete, and $\underline{E}$-cocomplete, A-457.
STOUT, William F. See PHILIPP, Walter.
STRALKA, Albert R. Duality and dimensional capacity for compact semilattices. Preliminary report, A-107.
---. See HOFMANN, Karl H.
STRASSER, Elvira Rapaport. Knot-like groups, A-292.
STRATIGOS, Peter. Wallman compactification, Stone-Čech compatification, and relative compactness in the vague topology, A-545.
STRAUS, E. G. See ARKIN, Joseph.
STRAUSS, Charles M. See BANCHOFF, Thomas F.
STRAUSS, Monty J. See SAEKS, Richard.
STRAWTHER, Dexter. See GUDDER, Stanley.
STRECKER, George E. Inverse limits and paracompact M-spaces. Preliminary report, A-220.
STRECKER, Jutta. Strong cancellation for free products in the category of bounded distributive lattices. Preliminary report, A-435.
STRONG, Lawrence D. and ALEXANDER, Charles C. On graphs with unique distance trees. Preliminary report, A-474.
SUBBARAO, M. V. See HARRIS, Vincent C.
SUBBIAH, S. See MAGILL, Kenneth D., Jr.
SUBRAMANIAN, Hariharaier. The lattice structure of an f-ring. Preliminary report, A-45.
SUBRAMANIAN, P. K. Two-norm spaces and quasi-reflexivity, A-188.
SUCHESTON, Louis. See BRUNEL, Antoine P.
---. See FONG, Humphrey S.
SUD, Shashi Bala. A new product topology and function spaces, A-508.
SUDBOROUGH, I. Hal. See SPRINGSTEEL, F. N.
SULLIVAN, Francis. Convergence of B-operators, A-177.
SULLIVAN, James. See IKEBE, Yasuhiko.
SULLIVAN, Theodore. Maximal properties in local recursion theory. Preliminary report, A-24.
SULLIVAN, Wayne G. Relaxation times for the evolution of Markov fields. Preliminary report, A-403.
SUMNER, David P. The nucleus of a point determining graph, A-39.
---. See GEOFFROY, Dennis P.
SUNDSTROM, Theodore. Groups of automorphisms of simple rings, A-73.
SUPRUNOWICZ, Konrad. Empirical inference from observed to not-observed: theories. Preliminary report, A-27; A connection between facts and theories. Preliminary report, A-379.
SWANSON, Laif. Two induced automorphisms. Preliminary report, A-596.
SWARTZ, Joel B. and BREMERMANN, Hans. Some comments on the parameter estimation and verification problems in biological systems. Preliminary report, A-385.
SWEET, Daniel. Periodic solutions for dynamical systems possessing a first integral in the resonance case, A-142.
SWETT, Allan K. Absolute logics: Δ-closures and the number of countable models. Preliminary report, A-553.
SWICK, Kenneth E. Convergence of solutions of a nonlinear first order delay differential equation, A-141.
SYMONDS, Robin G. See JAIN, S. K.
SZABO, Manfred Egon. Normalization in quantifier-complete categories, A-25; A categorical characterization of Boolean algebras, A-298.
SZEPTYCKI, Pawel. Friedrichs' extensions and p-restrictions. Preliminary report, A-184.
SZETÖ, George. A characterization of Azumaya algebras, A-68.
TADMOR, E. See GOLDBERG, Moshe.
TAFT, Earl J. and WILSON, Robert Lee. Some finite dimensional pointed Hopf algebras with nonsemisimple antipode, A-76.
TAKEUTI, Gaisi. The axioms of choice and the infinitary

language, A-26.
TALL, Franklin D. On the existence of nonmetrizable hereditarily Lindelof spaces with point-countable bases, A-327; Stalking the Souslin tree-- a topological guide, A-560.
---. See WEISS, W. A. R.
TALL, Franklin D. and WEISS, W. A. R. $\beta N-N$ may or may not be Blumberg. Preliminary report, A-597.
TALPUR, M. N. M. A spatial analogue of a theorem of Hayman. Preliminary report, A-396; On existence of asymptotic paths for subharmonic functions in R^m. Preliminary report, A-459.
TAMURA, Saburo. Three axioms for commutative rings, A-296.
TAMURA, Takayuki. Recent study of $\mathfrak{R}$-semigroups, A-87.
TAN, Kok-Keong and LIM, Teck-Cheong. Hausdorff metric on the family of weakly compact sets. II. Preliminary report, A-302.
TANG, Hsiung. Summability of Fourier-Bessel series, A-487.
TANIMOTO, Taffee. Real representatives of samples. Preliminary report, A-240.
TANNY, David. Some limit theorems for 1-dimensional branching processes in random environments (B. P. R. E.). Preliminary report, A-14; On multi-type branching processes in random environments (MBPRE). Preliminary report, A-323.
TARSY, Michael and BERMAN, Abraham. On the intersection of a cone and a subspace, A-499.
TAUSSKY-TODD, Olga. More on the L-property, A-409.
TAYLOR, B. A. See BERENSTEIN, Carlos A.
TAYLOR, G. D. See BACOPOULOS, A.
---. See KAUFMAN, Edwin H., Jr.
TAYLOR, Laurence R. Divisibility of the index with applications to inertia groups and $H^*(G/O)$. Preliminary report, A-464.
TAYLOR, Peter D. See JAMISON, Robert E. II.
TAYLOR, Walter F. Uniformity of congruences, A-47; Structures incompatible with varieties, A-529; Remarks on topological algebra, A-604.
---. See BULMAN-FLEMING, S.
TAYLOR, Willie E., Jr. See ETGEN, Garret J.
TEFTELLER, Steven C. A two-point boundary problem for nonhomogeneous second order differential equations, A-131.
---. See ETGEN, G. J.
TENG, Ta-Keng. Weakly dispersive flows and flows of characteristic 0, A-213.
TEPLY, Mark L. Generalizations of the simple torsion class and the splitting properties. Preliminary report, A-72.
TERRAS, Audrey A. Fourier coefficients of Eisenstein series of one complex variable for the special linear group, A-49.
TERRAS, Riho. A unified approach to some generalizations of almost periodicity, A-164.
TEWARSON, Reginald P. and STEPHENSON, John L. Numerical solution of transport equations of renal counterflow systems, A-498.
TEWARSON, Reginald P., KYDES, Andy S., STEPHENSON, John L. and MEJIA, Raymond. Use of sparse matrix techniques in numerical solution of differential equations for renal counterflow systems, A-498.
THARP, Leslie H. Necessity, apriority and provability, A-320.
THICKSTUN, William R., Jr. Motion of solitons in the complex plane. Preliminary report, A-249.
THIELEKER, Ernest A. On the explicit determination of Kunze-Stein intertwining operators with applications, A-106.
THOMAS, David E. Freeness and its generalizations in valued vector spaces. Preliminary report, A-333.
THOMAS, James W. A Nielsen number for Banach spaces. Preliminary report, A-192.
THOMASON, Steven K. Categories of frames for modal logic, A-320; Reduction of tense logic to modal logic, A-12.
THOMPSON, Robert C. The eigenvalues of a partitioned Hermitian matrix involving a parameter, A-453.
THORNTON, Melvin C. Semigroups of selfmaps, A-474.
THURSTON, William P. The existence of foliations, A-407.
TIJDEMAN, Robert. Hilbert's seventh problem: The method of Gel'fond-Baker and its application, A-509.
TILLER, John A. and FAY, Temple Harold. Unions in E-M categories and coreflective subcategories. Preliminary report, A-367.
TILSON, Bret. The trace theorem: A basic new tool for semigroup decomposition and complexity theory, A-104.
TING, Bing Y. See LUKE, Yudell L.
TING, Wei-Lung. On Chern classes of projective modules. Preliminary report, A-3.
TOBEY, Malcolm. See DONALD, John D.
TODD, Aaron R. Pseudo-completeness and completeness in linear topological spaces, A-189.
TODD, Olga Taussky. The determinant of the additive commutator of two integral 2 x 2 matrices, A-437.
TONNE, Philip C. Continuous automorphisms on rings of infinite matrices. Preliminary report, A-343.
TOUBASSI, Elias H. See KHABBAZ, S. A.
TOWBER, Jacob. Tangent bundles to affine quadric surfaces, A-59.
TOWSLEY, Gary W. Conformal deformation of meromorphic functions. Preliminary report, A-399.
TRANEN, B. See KRONK, Hudson, V. E.
TRANSUE, William R. and BOYD, Michael W. Properties of ultraproducts. Preliminary report, A-443.
TRAPP, George. See ANDERSON, William.
TRAVIS, C. C. On the uniqueness of solutions to boundary value problems for hyperbolic equations, A-611.
---. See REDDIEN, G. W.
TRENCH, William F. Inversion of Toeplitz band matrices, A-246.
TRETKOFF, Marvin D. Covering space proofs in combinatorial group theory, A-297; Some remarks on analytic continuation. Preliminary report, A-400.
---. See FINE, Benjamin.
TRIGGIANI, Roberto. Controllable systems in Banach space with unbounded operators. Preliminary report, A-311.
TROTTER, William T., Jr. A note on Dilworth's embedding theorem, A-609.
---. See BOGART, Kenneth P.
TROTTER, William T., Jr. and BOGART, Kenneth P. Measuring the complexity of partially ordered sets. Preliminary report, A-38.
TROY, William C. Oscillatory phenomena in nerve conduction equations. Preliminary report, A-377.
TSERPES, Nicolas A. See MUKHERJEA, Arunava.
TSOKOS, Chris P. On the probability distribution of the log of the sum of two correlated log-normal variates. Preliminary report, A-239.
TSOKOS, Chris P. and SMITH, T. L. On estimating the expected behavior of a stochastic epidemiological model applicable to small populations, A-345.
TUCKER, Charles T. Homomorphisms of Riesz spaces, A-182.
TUCKER, David. Finitely generated inseparable field extensions. Preliminary report, A-607.
---. See HEEREMA, Nickolas.
TUCKER, Howard G. See HUDSON, William N.
TUCKER, Thomas W. See GROSS, Jonathan L.
TULLY, Edward J., Jr. Commutative principal-ideal semigroups, A-105.
TURNER, Edward C. Nilpotent diffeomorphism groups, A-230.
TURNER, Robert E. L. A nonlinear Krein Rutman theorem and applications, A-149.
TUTTE, W. T. Spanning subgraphs with specified valencies, A-391.
TYMCHATYN, Edward D. and FRIBERG, B. On a problem of Martin concerning strongly convex metrics, A-213.
UBHAYA, Vasant A. Approximation by isotone functions- a min-max form of best approximation. Preliminary report, A-307; Infima of integrals involving mollifier functions by a mathematical programming approach. Preliminary report, A-376.
UEBELACKER, James W. Product graphs for given subgroups of the wreath product of two groups. II. Preliminary report, A-36.

ULLOM, Stephen V. Relative normal integral bases in quaternion extensions. Preliminary report, A-58.
URNER, Ronald M. Topological general position. Preliminary report, A-210.
VANDERJAGT, Donald W. Sufficient conditions for locally connected graphs. Preliminary report, A-32.
VAN DER POORTEN, Alfred J. See MORRIS, Sidney A.
VAN LEEUWEN, L.C.A. See JENKINS, Terry L.
VARGA, Richard S. See SAFF, Edward B.
VARMA, A.K. A new proof of Timan approximation theorem. II, A-640.
---. See MILLS, T.M.
VASCONCELOS, W.V. See DAWSON, Jeffrey L.
VASUDEVAN, R. A note on separation axioms in hyperspaces. Preliminary report, A-16; Weaker forms of compactness in hyperspaces. Preliminary report, A-330; A note on weaker forms of compactness in hyperspaces. Preliminary report, A-383; Pairwise compactness in bitopological hyperspaces. Preliminary report, A-449.
VASUDEVAN, R. and GOEL, C.K. Separation axioms in bitopological hyperspaces. Preliminary report, A-17; Some more separation axioms for bitopological hyperspaces. Preliminary report, A-323; Connectivity properties of bitopological hyperspaces. Preliminary report, A-382.
VAUGHAN, Jerry E. Some properties related to [a,b]-compactness. I, A-621.
---. See HODEL, Richard E.
VAUGHAN, Nick. On overrings of a domain. III. Preliminary report, A-61.
VAUGHAN, Theresa P. See LONG, Andrew F.
VEECH, William A. Uniformly distributed sequence generators, A-51; Topological dynamics, A-642.
VERMA, H.K. Transient heat transfer through grain stored in spherical bin with periodic change of external temperature. Preliminary report, A-499; Magneto-elastic stresses, A-549; Evaluating film coefficient in a single-kernel drying, A-595.
VERMA, Sadanand. On a fundamental matrix of a first order n-dimensional linear system. Preliminary report, A-129.
VICK, James W. See ALEXANDER, J.P.
VIGLINO, Giovanni. Extensions of functions and spaces, A-220.
VIJAYAKUMAR, A.K. See KANNAN, V.
VINCENT, Paul A. A metrization theorem for 2-manifolds. Preliminary report, A-408.
VITALE, Richard A. Representation of a crinkled arc, A-534.
VORA, Chandan S. Counterexamples on the extension of Lipschitz function with respect to three Hilbert norms and two Lipschitz conditions. Preliminary report, A-378; A version of Minty's theorem for a vector space with two Hilbert inner products. Preliminary report, A-446; Fixed point theorems for compact weighted maps of a polyhedron and a metric ANR. Preliminary report, A-565.
VOTRUBA, George F. See NASHED, M. Zuhair.
VOTRUBA, George F. and NASHED, M.Z. Convergence of a class of iterative methods of Cimmino type to weighted least square solutions. Preliminary report, A-245.
VOUGHT, Eldon J. Monotone decompositions into trees of Hausdorff continua irreducible about a finite subset, A-412; Monotone decompositions of continua, A-630.
WADE, William R. Sets of divergence of the group 2^{ω}, A-162.
WAGNER, Carl G. Differentiability in local fields of prime characteristic, A-56; Differentiable functions of a p-adic variable, A-369; Integral-valued polynomials over GF[q,x]. Preliminary report, A-605.
WAHL, Jonathan M. Equisingular deformations of surface singularities. Preliminary report, A-64.
WAID, Carter. On Dirichlet's theorem and infinite primes, A-48.
WAID, Margaret C. A second order nonlinear degenerate parabolic equation with nonlinear boundary conditions. Preliminary report, A-149.
WAKE, Graeme C. and HEATH, J.M. Nonlinear eigenvalue problems with mixed boundary conditions, A-150.
WALES, David B. Linear groups containing an element with specified eigenvalues, A-95.
WALKER, Carol Lee. Local quasi-isomorphisms of torsion free abelian groups, A-99.
WALKER, Elbert A. Remarks on T*-modules, A-99.
WALKER, Henry M. An equivariant Serre spectral sequence, A-405.
WALL, Basil M. Convergence set for a continued fraction. Preliminary report, A-157.
WALL, Charles R. Derivatives of some arithmetic distributions, A-52; Arithmetic distribution functions. Preliminary report, A-602.
WALL, Curtiss E. See CHARTRAND, Gary.
WALL, David W. Conditions for $\phi(n)$ to properly divide $(n-1)$, A-481.
WALL, G.E. See HAVAS, George.
WALL, James R. Generalized inverses for stochastic matrices, A-290.
WALLACH, Nolan R. The unitary dual of the universal covering group of SU(2,1). Preliminary report, A-113.
WALSH, Bertram. Positivity of the trace form on nuclear operators on A(S) characterizes S as a Choquet simplex. Preliminary report, A-443.
WALSH, John J. Open mappings on manifolds, A-450.
WANG, Cecilia Y. See MIRSKY, Norman D.
WANG, James Li-Ming. Modulus of approximate continuity for R(X). Preliminary report, A-308; Strong regularity at nonpeak points. Preliminary report, A-439.
WANNIER, Milton. Free homeomorphisms of the real line. Preliminary report, A-331.
WARD, James F., Jr. Minimum seminorm properties of the singular-weighted matrix pseudoinverse, A-336.
WARD, James R. See KARTSATOS, Athanassios G.
WARFIELD, Robert B., Jr. Simply presented Abelian groups. Preliminary report, A-100.
WARNER, Garth W. L-functions on reductive groups, A-411.
WARNER, Hoyt D. Value-theoretic decomposition of quadratic forms over a linearly compact field, A-57.
WARNER, Seth. See SHANKS, Merrill.
WARREN, Joseph. New proofs of two classical cluster set theorems. Preliminary report, A-119.
WARREN, Richard H. Inequalities for the number of integers in the sum of sets of positive integers, A-54; Continuity of mappings of fuzzy topological spaces, A-451.
WARREN, Richard H. and DOOHER, Terrence E. Structure of the set of compatible proximities when the set is finite, A-506.
WASILESKI, John S. Alexandroff bases and compactifications, A-209.
WATERMAN, Daniel and SAHNEY, Badri N. On Cesaro summability of Fourier series. Preliminary report, A-394.
WATERMAN, Robert E. Operators with large point spectrum, A-191.
WATSON, Bill. Almost semi-Kähler manifolds. Preliminary report, A-314; Almost Hermitian submersions, A-206.
WEAVER, James R. A Sylow p-subgroup of a subgroup of A(G), A-85.
WEBB, Cary H. A strengthening of the torsionless property in abelian groups, A-454.
WEBB, William A. See JORDAN, James H.
WEINACHT, Richard J. See GILBERT, Robert P.
---. See QUINN, D.W.
WEINSTEIN, Alan D. Lagrangian submanifolds, A-232; On the spectrum of manifolds, all of whose geodesics are closed. Preliminary report, A-330.
WEINSTEIN, Joseph. Reconstructing colored graphs. Preliminary report, A-34.
WEINSTEIN, Scott. Some applications of Kripke models to formal systems of intuitionistic analysis. Preliminary report, A-552.
WEINSTOCK, Barnet M. Generators for H(D), A-128.
WEISMAN, Carl S. Nonarchimedean harmonic analysis and analytic functions, A-58.
WEISPFENNING, Volker. The model-completions of the theory of commutative regular differential rings of global characteristic 0 and the theory of commutative regular f-rings, A-13.
WEISS, Guido L. See COIFMAN, Ronald R.
WEISS, Guido L. and COIFMAN, Ronald R. Noncommutative harmonic analysis on spaces of homogeneous

type, A-170.
WEISS, Norman J. Multipliers and convergence for Fourier series on compact Lie groups, A-162.
WEISS, N.A. See NIELSON, Gregory Morris.
WEISS, W.A.R. Some non-Blumberg spaces. Preliminary report, A-561.
---. See TALL, Franklin D.
WEISS, W.A.R. and TALL, Franklin D. On countably compact spaces in which closed sets are G_δ. Preliminary report, A-560.
WELLER, Glenn P. The intersection multiplicity of topological manifolds. Preliminary report, A-231.
WELLS, Charles F. Centralizers of permutation groups and automorphisms of trees, A-103; Polynomials over finite fields which commute with translations, A-287; Centralizers of transitive semigroup actions and endomorphisms of trees, A-436; The wreath product of categories. Preliminary report, A-526; A categorical construction with applications to automorphisms. Preliminary report, A-567.
WELLS, Robert. A combinatorial immersion theorem, A-599.
WELLS, Robert and FAVARO, Luiz A. On a theorem of Kuiper. Preliminary report, A-330.
WEN, Shih-Liang. On the existence theorem of an eigenvalue problem arising from hydrodynamics. Preliminary report, A-594.
WENTE, Henry C. The Dirichlet problem with a volume constraint, A-201.
WERMER, John. Polynomially convex hulls of some sets. Preliminary report, A-440.
WERNER, Helmut. See LOEB, Henry L.
WESTON, J.H. See SHILLETO, J.R.
WESTON, Kenneth. A useful computer program for nonassociative rings. Preliminary report, A-79.
WHEEDEN, Richard L. See MUCKENHOUPT, Benjamin.
WHITAKER, Rick. See LUKE, Yudell L.
WHITE, Albert G. See DIMINNIE, Charles R.
WHITE, Arthur T. Self-dual imbeddings of Cayley graphs, A-31.
WHITE, Robert E. Multipliers of $B_{p,k}$ and $B^{loc}_{p,k}(\Omega)$ spaces and their applications to partial differential equations. Preliminary report, A-149.
WHITEMAN, Albert Leon. Williamson type matrices of order $2q(q+1)$, A-623.
WHITFIELD, John H.M. See MAH, Peter F.
WHITNEY, Stephen. Model classes of linear theories. Preliminary report, A-317; Model classes of linear theories. II. Preliminary report, A-500.
WHYBURN, Clifton T. A note on character sums. II. Preliminary report, A-387.
WICHNOSKI, Bruno J. On the existence of wave operators for time dependent nonlinear evolution equations. Preliminary report, A-339.
WICKE, Howard H. See WORRELL, John M., Jr.
WICKE, Howard H. and WORRELL, John M., Jr. The concept of a θ-refinable embedding. Preliminary report, A-219; A generalization of quasi-complete spaces. Preliminary report, A-407; Completeness of semicomplete Moore spaces, A-507.
WIEGAND, Roger A. and WIEGAND, Sylvia Margaret. Finitely generated modules over Bézout rings, A-62.
WIEGAND, Sylvia Margaret. Semilocal domains whose finitely generated modules are direct sums of cyclics. Preliminary report, A-435.
---. See WIEGAND, Roger A.
WIGGINS, Kenneth L. See HENRY, Myron S.
WIGHTMAN, Arthur S. Hilbert's Sixth Problem: Mathematical treatment of the axioms of physics, A-460.
WILDFOGEL, Dennis J. Double algebras, Segal algebras, and annihilator algebras. I, A-9; A generalization of both the Peter-Weyl and the spectral theorems, A-175; Double algebras, Segal algebras, and annihilator algebras. II. Abstract Tauberian theorems, A-299.
WILF, Herbert S. Algorithms for generating combinatorial objects uniformly at random, A-391.
---. See HUTCHINSON, Joan P.
WILHELMSEN, Don R. A linear algorithm for generating positive weight cubatures. Preliminary report, A-246.
WILLARD, Stephen and KARNIK, S.M. Coherence topologies, A-327.
WILLIAMS, Gareth. Fine topologies in relativity theory. Preliminary report, A-343.
WILLIAMS, Kenneth S. 3 as a ninth power (mod p), A-296.
---. See LEONARD, Philip A.
WILLIAMS, R. Douglas. See ADLER, Andrew.
WILLIAMS, Scott W. A simple fact of rationals. Preliminary report, A-218.
WILLIAMS, W. Wiley. Semilattices on Peano continua, A-634.
WILLIAMSON, James E. Panconnected graphs. Preliminary report, A-37.
WILLIAMSON, Stanley G. On certain linear algebraic techniques in enumeration, A-410.
WILLNER, Barry. See RUBENFELD, Lester A.
WILSON, David C. On constructing exotic UV^1-mappings. Preliminary report, A-228.
WILSON, Richard M. See BAKER, Ronald D.
WILSON, Robert Lee. See TAFT, Earl J.
WILSON, Robert S. Representations of finite rings, A-69.
WINARSKY, Norman. Reducibility of principal series representations of P-adic groups, A-564.
WING, G. Milton. See ALLEN, Richard C., Jr.
WINKLER, Peter M. Model companions of expanded theories. Preliminary report, A-25.
van WINTER, Clasine. Invariant subspaces of analytic multi-particle Hamiltonians, A-251.
WOJTKOWSKI, Waclaw G., WOJTKOWSKI, Wita and MACKLIN, M. Catastrophy theory in modeling behavioral stages in Xenopus laevis embryos. Preliminary report, A-322.
WOJTKOWSKI, Wita. See WOJTKOWSKI, Waclaw G.
WOLFE, John E. Topological properties of compact Hausdorff spaces T such that C(T) is injective, A-182.
WOLFE, Peter. The decay of solutions of the two dimensional wave equation in the exterior of a straight strip, A-148.
WOLFE, Stephen James. On the unimodality of stochastic processes. Preliminary report, A-236.
WOLFF, Harvey. V-localizations and V-monads. II, A-81.
WOLFOWITZ, J. Signaling over a Gaussian channel with feedback and autoregressive noise, A-548.
WOLLKIND, David J. Nonlinear stability analysis of the melting of a dilute binary alloy. Preliminary report, A-250.
WONG, Pak-Ken. On a complemented Banach algebra. Preliminary report, A-178.
WONG, Tin Kin. See AMEMIYA, Ichiro.
WONG, Warren J. Extensions of homomorphisms in classical groups, A-87.
WOOD, Bruce. See EISENBERG, Sheldon M.
WOOD, David H. See PAPADAKIS, John S.
WOODS, Jimmie D. An approximation to the inverse of a Laplace transform. Preliminary report, A-161.
WOODS, John M. Some criteria for finite and infinite monodromy of plane algebraic curves, A-223.
WOODS, R. Grant. Topological extension properties, A-598.
WOODWARD, Gordon S. On p-Sidon sets. Preliminary report, A-163.
---. See JOHNSON, Gerald W.
WORRELL, John M., Jr. See WICKE, Howard H.
WORRELL, John M., Jr. and WICKE, Howard H. Remarks on a property of θ-refinable spaces. Preliminary report, A-622.
WORTMAN, Dennis H. Interpolating sequences on convex curves in the open unit disc, A-181.
WRIGHT, David G. Cantor sets and homotopy connectedness of manifolds, A-227.
WRIGHT, E.M. Large cycles in large graphs. Preliminary report, A-364; The structure of thinly-edged large graphs. Preliminary report, A-478.
---. See SHEEHAN, J.
WRIGHT, Fred M. and BAKER, James D. Coming close and double limits, A-118.
WU, Hung-Hsi. Applications of some theorems in partial differential equations to geometry, A-412.
WU, James Pei-Yuan. On c.n.u. contractions and spectral operators. Preliminary report, A-535.
WULBERT, D.E. Korovkin approximations, A-638.
YANG, Chung-Chun. A problem on polynomials. Pre-

liminary report, A-444.
---. See RUBEL, Lee A.
YANUSHKA, Arthur. A characterization of the groups PSp(2m, q) as rank three permutation groups. Preliminary report, A-520.
YAP, Leonard Y. H. Nonfactorization of functions in Banach subspaces of $L^1(G)$. Preliminary report, A-488.
YAQUB, Adil M. See OUTCALT, David L.
---. See PUTCHA, Mohan S.
YEAGY, Robert W. See BUTTS, Hubert S.
YEUNG, Daniel S. Synthesis of time optimal control. Preliminary report, A-378.
YODER, Lane. Variation of multiparameter Brownian motion, A-238.
YOH, Richard W. Congruent relations on left canonic semigroups. Preliminary report, A-71.
YORKE, James A. See ALEXANDER, J. C.
---. See KAPLAN, James L.
YOUNG, Eutiquio C. A mixed problem for the Euler-Poisson-Darboux equation in two space variables, A-144.
YOUNG, Hobart P. Social choice scoring functions. Preliminary report, A-313.
YOUNG, Kiang-Chuen. Some simple subgroups of the Rudvalis simple group. Preliminary report, A-481.
YOUNG, Paul. See SHAY, Margaret.
YOUNG, Robert M. Inequalities for a perturbation theorem of Paley and Wiener, A-162.
YU, Chung Ling. The existence of the solution of the elliptic Cauchy problem. Preliminary report, A-146; On the global solvability of the linear elliptic Cauchy problem, A-374; Solvability of the Cauchy problem for linear elliptic equations with analytic coefficients, A-438.
ZACHARIOU, Andreas. A study of inner product spaces. Preliminary report, A-371; Reversible orthogonalization, A-431.
ZAHLER, Raphael. Fringe families in the stable stems. Preliminary report, A-558.
ZAIDMAN, S. Bohr-Neugebauer theorem for operators of finite rank in Hilbert spaces, A-594.
ZAJTA, Aurel J. On the solution of the Diophantine equation $A^4 + B^4 = C^4 + D^4$, A-290.
ZAME, William R. Extendibility, boundedness and sequential convergence in spaces of holomorphic functions, A-543.
ZAMEERUDDIN, Quazi. See SINGH, Surjeet.
ZARANTONELLO, Sergio. Zero sets of bounded holomorphic functions in a poliannulus. Preliminary report, A-127.
ZAREMBA, S. K. Good lattice points modulo composite numbers. Preliminary report, A-242.
ZEITLIN, David. A conjecture on the general coefficients of the chromatic polynomial of a complete bipartite graph $K_{p,q}$, A-298; Identities for integer sequences involving the greatest integer function. IV. Preliminary report, A-367; Identities for integer sequences involving the greatest integer function. V. Preliminary report, A-433; A polynomial identity for the chromatic polynomials of a complete r-partite graph $K_{p_1,p_2,\ldots,p_r}$, A-479; Identities for integer sequences involving the greatest integer function. VI, A-523; Identities for integer sequences involving the greatest integer function. VII. Preliminary report, A-589.
ZENOR, Phillip L. Hereditary separability and the hereditary Lindelöf property in product spaces, A-385; Hereditary separability and the hereditary Lindelöf property in function spaces, A-449; Some topological properties determined by PN-operators. Preliminary report, A-620.
---. See GRUENHAGE, Gary.
---. See REED, George Michael.
ZERLING, David. Some theorems on (CA) analytic groups, A-111.
ZIMMERBERG, Hyman J. Linear integro-differential-boundary-parameter problems, A-494.
ZITARELLI, David E. Inverse subsemigroups of a completely 0-simple semigroup, A-87.
ZITRON, Norman. A continuous model for optimal-cost transportation routes in a circular city. Preliminary report, A-254.
ZLOBEC, Sanjo. See MASSAM, H.
ZŁOTKIEWICZ, Eligiusz. See LEWANDOWSKI, Zdzisław.
---. See READE, Maxwell O.
ZUCKERMAN, Martin M. Weakened versions of the axiom of choice, A-26.
ZWAS, Gideon. See GOLDBERG, Moshe.
ZWICKER, William S. See ABRAMSON, Fred G.
ZWILLINGER, Daniel. On those even numbers that can be expressed as the sum of two prime numbers of a certain form, A-478.

INDEX
Volume 21 (1974)

ABSTRACTS PRESENTED TO THE SOCIETY, A-1, A-287, A-363, A-431, A-473, A-519, A-587
Errata—Volume 20, A-257, 129, 234, 310
Volume 21, 129, 170, A-464, 234, 310
Index of Abstracts—Volume 21, A-653

ADVERTISERS, INDEX TO, A-286

ASSISTANTSHIPS AND FELLOWSHIPS
In Mathematics in 1972–1973 (Supplementary List), 128
In Mathematics in 1974–1975 (Supplementary List), 169
In Mathematics in 1975–1976,

BACKLOG OF MATHEMATICS RESEARCH JOURNALS, 124, 270

DOCTORATES CONFERRED
In 1972–1973 (Supplementary List), 125
In 1973–1974, 285
In 1971–1972 (Supplementary List), 308
In 1972–1973 (Supplementary List), 308

ERRATA, 267

FEATURE ARTICLES
Acknowledgements, 215
A Measure of Quality of Doctoral Programs, 260
AMS Research Fellowship, 117
AMS Research Fellowship Fund, Request for Contributions, 71, 117, 348
A Report to the Council of the AMS, 84
Case Studies, Some Mathematicians with Nonacademic Employment, 346
Combined Membership List 1974–1975, 154
Doctoral Scientists and Engineers in the United States, 212
Doctorates and Jobs, 1974 Report, 335
Doctorates in Mathematics and Related Areas, July 1967–June 1973, 254
How to Talk Mathematics, 155
Irregular Positions, 88
National Science Foundation Budget, 152
New Format for Abstracts, 179
Nominations for Vice-President or Member-at-large, 204
Nonacademic Employment of Ph.D.'s, 206
Mathematical Sciences Employment Register, 268
Preliminary report of the MAA-AMS Committee on Employment of Mathematicians in Two-Year Colleges, 349
Relations between US-USSR Scientific Journals and Publishers, 192
Report of the President for 1973, 79
Research Proposals Submitted to the Mathematical Sciences Section, National Science Foundation, 265
Sex, Race and Citizenship of New Doctorates, July 1973–1974, 308

Some Comments on Three Resolutions, 78
Statement by the CCMJ Editorial Committee, 269
Submission of Manuscripts to the Proceedings of the AMS, 81
The Annual Meeting: Site Selection and Cost Control, 82
The Ph.D. Ancestry of the Leading U.S. Mathematics Faculties, 341
The Preservation of Archival Materials, 187
The Role of the Dissertation in the Ph.D. Program, 180
The Role of the Ph.D. in Two-Year College Training, 263

INTERNATIONAL CONGRESS OF MATHEMATICIANS, 73, 199

INVITED SPEAKERS AT AMS MEETINGS, 72, 116, 151, 178, 197, 253, 340

LETTERS TO THE EDITOR, 93, 118, 158, 222, 309, 357
Lipman Bers, 309
Chandler Davis et al., 158
Harry Goheen, 357
John W. Green, 93
Peter Henrici, 358
Robert Hermann, 222, 309
Judith Q. Longyear, 118
Saunders Mac Lane, 118, 359, 361
Hugh J. Miser, 310
Cathleen Morawetz, 362
Paul S. Mostert, 93
Anil Nerode, 360
Barbara M. Stauffer, 93
E. G. Straus, 223
Daniel H. Wagner, 359
Gail Young, 357
Leo Zippin, 223

MEETINGS OF THE AMS
Abstracts Presented to the Society, A-18, A-331, A-385, A-453, A-509, A-566, A-599
Calendars of Meetings, Inside front covers
Preliminary Announcements
March: Gainesville, Florida, 69
April: New York, New York, 69, 109
Santa Barbara, California, 70, 110
May: DeKalb, Illinois, 112, 147
October: Middletown, Connecticut, 179, 194
November: Nashville, Tennessee, 195, 238
Los Angeles, California, 196, 239
Houston, Texas, 197, 240
January: Washington, D.C., 241, 324
Programs of Meetings
January: San Francisco, California, 2
March: Gainesville, Florida, 100
April: New York, New York, 136
Santa Barbara, California, 144
May: DeKalb, Illinois, 172
October: Middletown, Connecticut, 236
November: Nashville, Tennessee, 312
Los Angeles, California, 318
Houston, Texas, 321

NEW AMS PUBLICATIONS, 95, 130, 163, 191, 224, 273, 350

NEWS ITEMS AND ANNOUNCEMENTS, 118, 134, 160, 164, 168, 179, 189, 191, 198, 211, 219, 221, 223, 231, 265, 363

PERSONAL ITEMS, 97, 132, 165, 190, 230, 271, 364

QUERIES, 119, 159, 186, 220, 280

RESERVATION FORMS, A-362, A-430, A-585, A-651

SALARY SURVEY, 255

SEMINARS AND INSTITUTES
Symposium on Some Mathematical Questions in Biology in San Francisco, 68, 105
Symposium on Category Theory Applied to Computation and Control in San Francisco, 107
1974 Summer Seminar in Applied Mathematics, 70, 114, 252
1974 Summer Research Institute on Algebraic Geometry, 114, 253
Symposium on Some Mathematical Questions in Biology, New York, 198, 251, 334
Symposium on Theory vs. Practice in the Finite Element Method, New York, 251, 334

SITUATIONS WANTED, A-258, A-348, A-413, A-465, A-511, A-571, A-643

SPECIAL MEETINGS INFORMATION CENTER, 90, 121, 161, 188, 218, 278, 355

SPECIAL SESSIONS, CHAIRMEN AND TOPICS, 72, 116, 151, 196, 250, 340

SUMMER GRADUATE COURSES, 127, 169

TAX STATUS OF GRANTS

VISITING MATHEMATICIANS, 281
(Supplementary List), 92, 126, 353